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The Monastery of Debra Damo, Ethiopia

By DEREK MATTHEWS, Esq., A.R.I.B.A., and ANTONIO MORDINI, Esq.

PART I. INTRODUCTION, AND DESCRIPTION OF THE MONASTERY

By DEREK MATTHEWS, Esq., A.R.I.B.A.

THE famous monastery of Debra Damo in Tigrai, known to be of great importance in Northern Ethiopia over a very long period of history, preserves in its church one of the few examples still extant of an ancient style of Ethiopian architecture.

Its preservation is undoubtedly due to the fact that the monastery is situated high on a rocky mountain, entirely surrounded by cliffs, and it can be approached only by climbing a rope fifty feet up the vertical rock face. It successfully resisted attacks by the Moslems in the sixteenth century.

The *amba*[1] on which the monastery is built is situated amongst the mountains on the Eritrean border, and can be approached only on foot or mule-back. The nearest motor-road runs between Adigrat and Adua. From a point approximately half-way between these towns, near the village of Adi Gorundati, tracks wind down, crossing a small river, the Ruba Hesta, tributary of the Mareb, and then climb up to the base of the high cliffs of the *amba*. During the Italian occupation, Professor Mordini had a road constructed to the *amba*, in the hope of getting the Duke of Aosta to visit the monastery. This road has now fallen into disrepair.

The scheme for restoring the church was first mooted by Mr. D. R. Buxton who visited the church in 1944 and found it in a state of partial collapse; some of the roofs had already fallen in. The efforts of Mr. Buxton, the British Council, Dr. O. G. S. Crawford, and the Society of Antiquaries of London resulted in my being appointed architect in charge of the restoration. It was a difficult, yet fascinating task.

The reconstruction gave me a unique opportunity to examine parts of the building which are normally closed to all but the priests, and to record by camera and other means the unusual form of construction and decoration. Travellers at various periods have described the monastery, but none seem to have had such an opportunity to investigate the structure of the church. A preliminary description of this appeared in *Antiquity*, vol. xxiii (1949), and also in *The Builder*, No. 5607, 4th August 1950. This description is now presented in an entirely new form, with drawings and details of the main church. The only other publication which attempted a complete description was that of the Deutsche Aksum-Expedition (1905–6), by Littmann, Krencker, and Lüpke (Berlin, 1913). Considering that they only spent a total of two hours in the monastery, they gathered a remarkable amount of accurate information. My investigations during the reconstruction work fill in some gaps in their descriptions, and

[1] *Amba*, i.e. 'hill' or 'hill-top', from the use of such came to mean 'Hill-fort', just as *Debra*, with a similar meaning, came to mean 'Monastery'.

correct a few errors in their work, which were due to the limited time they had at their disposal. Mr. D. R. Buxton's and Professor Mordini's sundry papers also shed light on various aspects of the monastery. Subsequent modifications to the main roof, after 1944, and before my arrival, as well as my own discoveries, necessitate a new description.

The method of construction of the church is unusual. The walls consist of tile-like stones set in earth mortar, strengthened with longitudinal beams which are themselves fixed to the walls with cross-pieces, projecting, and known locally as 'monkey-heads'. Such a method of construction has been used as far apart as Crete, Asia Minor, and Tibet. It also seems to have been the normal constructional method of the Axumite builders in Ethiopia (the kingdom of Axum was converted to Christianity in the fourth century), and the Axumites translated the pattern of horizontal timbers, cross-logs, and window and door framing into the monolithic decoration of the storied obelisks of Axum, nearby.[1] These patterns were also used in the rock-hewn churches near Lalibela,[2] in a style of architecture which continued until the disturbances of the sixteenth century. This is yet another example of timber forms being translated into stone, a common trend in architectural history. Methods of reinforcing walls have been in use since ancient times.[3] The type of construction is an indication of the probable great age of the structure, being related to Axumite building methods. The character of the walls of the church is nearer to the type of decoration on the Axum obelisks than to the not dissimilar method of wall reinforcement used today in Northern Ethiopia, and even in the Arab houses in Suakin.[4] Professor K. A. Cresswell states (*Archaeologia*, xciv (1951), pp. 97–102) that the construction of the *Kaʿaba* in A.D. 608 with alternate courses of stone and timber was the result of the employment of an Abyssinian named *Bāqūm*.

I found that alternations of rain and sun had set up irreversible movements which, over a very long period, had become noticeable. All the external walls were leaning outwards mushroom-like. In many cases the movement had only taken place in the outer half of the wall, with the face of the wall peeling off: in these cases the inner wall planes were hardly affected, except on the north side of the church. There were vertical cracks at the quoins and junctions with cross-walls. The north wall had leaned out so far that it could no longer support the flat earth-roof, which had fallen in over the north loft. The Italians had shored up the building, and roofed parts in corrugated iron.

[1] The Italians during the occupation took one of these obelisks from Axum and erected it in Rome in the Piazza del Circo Massimo outside a modern building which was the Ministry of Italian Africa.

[2] D. R. Buxton, 'Ethiopian rock-hewn churches', *Antiquity*, xx (1946), 60–69, and 'The Christian antiquities of Northern Ethiopia', *Archaeologia*, xcii (1947). A. A. Monti Della Corte, 'Lalibela', *Rome* (1940).

[3] Such a constructional method as the chainage of walls has been used since ancient times. Philonius of Byzantium wrote, regarding the walls of strongholds: 'oak beams, put together with their ends, ought to be knotted together lengthwise in the stonework of the façade and towers. This chainage at six feet vertical distance apart is to localise the effect of enemy missiles on the wall, and to make repairs easier.'

Vitruvius mentioned the cross beams that were used in Roman construction. In the sixth century Procopius discovered them in military buildings in Persia. Krencker has noted such forms of construction in Tibet.

Dr. Bersu in *Antiquity*, xx (1946), 5, describes a similar timber and stone construction in a prehistoric Swiss hill-fort. Dr. O. G. S. Crawford suggests that the style in Ethiopia could have originated in the numerous hill-forts (*amba*) mentioned in the ancient Abyssinian annals.

[4] D. H. Matthews, 'The Red Sea Style', *Kush*, i (1953).

I myself had to scale the cliff on each visit to the monastery, and all building materials, cement bags, reinforcing rods, sand, stone, and scaffolding poles had to be hauled up. I established myself permanently on the mountain top, living in one of

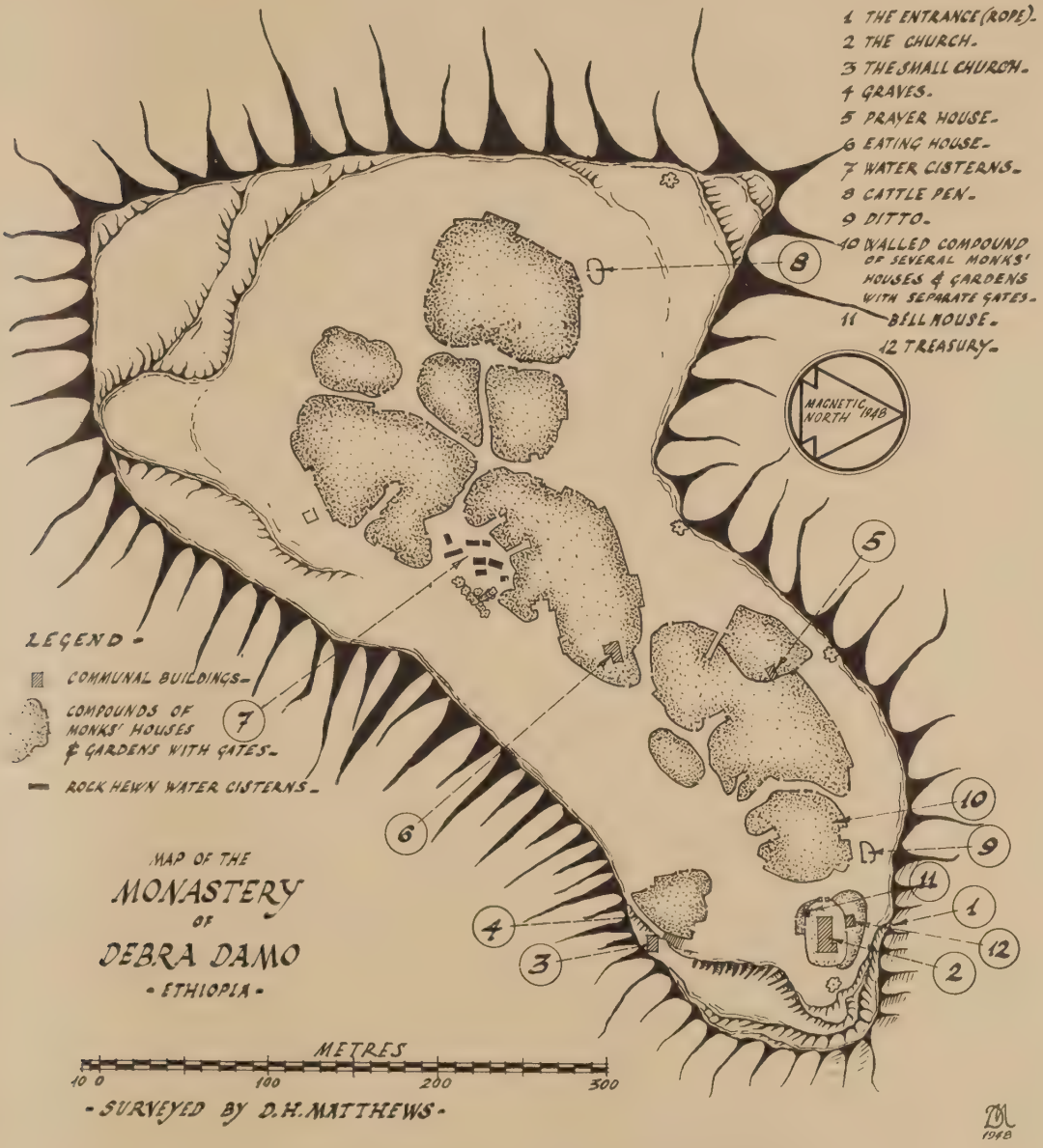


FIG. 1. Plan of the Monastery. (By courtesy of *Antiquity*.)

the monastery houses. After eighty-two working days the restoration was complete. Although we were obliged to work during the period of seasonal rains, only eleven hours were lost on the site because of bad weather.

The restoration involved strengthening the external walls with reinforced concrete

beams connected together with vertical ties, within the thickness of the walls, using the external stonework as permanent shuttering. These reinforced concrete beams now encircle the building invisibly. In addition, diagonals and cross-ties were placed where necessary. The strengthening members were not visible from inside or outside the church. Those walls which were leaning dangerously were demolished, all timbers indexed, and the whole replaced in exactly the same form as before. At the same time it was a simple matter to repair minor defects. The building is now structurally sound and in good order.

Whilst demolishing portions of the walls, light entered the church, and I was able to photograph details not hitherto properly recorded, and to make drawings.

DESCRIPTION OF THE MONASTERY

The Amba

Seen from the distance the *amba* is typical of those in the district, except that the flat top is entirely encircled by cliffs (pl. 1, *b*). The vertical walls of the bastion of rock rise out of a cone-shaped base, rocky, and covered with thorn trees and candelabra euphorbias. The ground, between the *amba* and the level cultivated land of the valley where runs the motor-road, is intersected by torrent beds which make it impossible to reach the monastery by means of wheeled traffic. The nearest point for motor traffic is the village of Adi Gorundati, about three hours' walk from the monastery.

Having left the vehicle at the village, one descends on foot or mule-back to ford the river, after which the tracks climb up towards the base of the *amba*. It is necessary to pass round the north-west corner (fig. 1) and along the base of the north side before the ground has sloped up to within approximately 100 feet below the cliff top; the other walls of the *amba* are far higher than this. It is here that the famous rope hangs every day except Sundays, for visitors to climb the fifty feet between the outside world and the gatehouse perched on the ledge half-way down the cliff (pl. 1, *b*).[1]

[1] I arrived for the first time at Debra Damo on the 14th February 1948. I had previously called at Macallé and reported to Ras Seyoum, hereditary overlord of Tigrai. He had received me most hospitably, and sent word on to the monastery that 'I was to be received as they had received him'; he had been there the week before. This proved to be true; I was met on the road by Afa-Mamher Musgubba Selassie, the representative of the head of the monastery. He had with him five riding mules and a pack-mule, under the charge of Barumbarus Abraha Gabrahid, a genial rogue wearing a leather skirt; he was subsequently engaged as my foreman during the work. They gave me the same mule that Ras Seyoum had used, together with his richly ornamented saddle-cloth. We had to ride quickly to arrive at the monastery before dark, as the rope would be hauled up during the following day which was a Sunday. Thunder was echoing in the distance, and it was raining slightly. After about three hours we arrived at the monastery; the top was lined with figures watching our small procession.

On arrival at the rope, they threw down a carpet for us to rest on, before going up. The goods were pulled up first, then we ascended, and were received by Mamher Gabra Christos, the head of the community. Through age and infirmity, his duties are carried out by Mamher Wolde Mariam. I handed over the letters I had brought from the Echeggi, and the Ministry of Public Works, and we climbed up on to the top of the *amba*, kissing the rock where the founder is reputed to have dropped his cross.

As we rounded the church compound and reached the gatehouse, an unexpected scene was staged. At our appearance a lovely barbaric chant arose, accompanied by drums and the swinging of smoking censers. Truly I was being received as they had received their feudal chief. The church compound was packed with monks in gorgeous robes. with their umbrellas and crosses, and a red carpet laid up to the front of the church. The musicians were on the right, under a tree, and on the left of the gate was a chair for me, covered with a carpet. After kissing Ras Seyoum's large silver cross, I sat on the chair they had prepared for me. The silence was intense, until the musicians started their wild chanting, punctuated by irregular drum beats. A monk then came forward, and

The rope is made of plaited leather thongs in imitation of a serpent (see the description of the foundation of the monastery). The monks themselves grasp the rope with

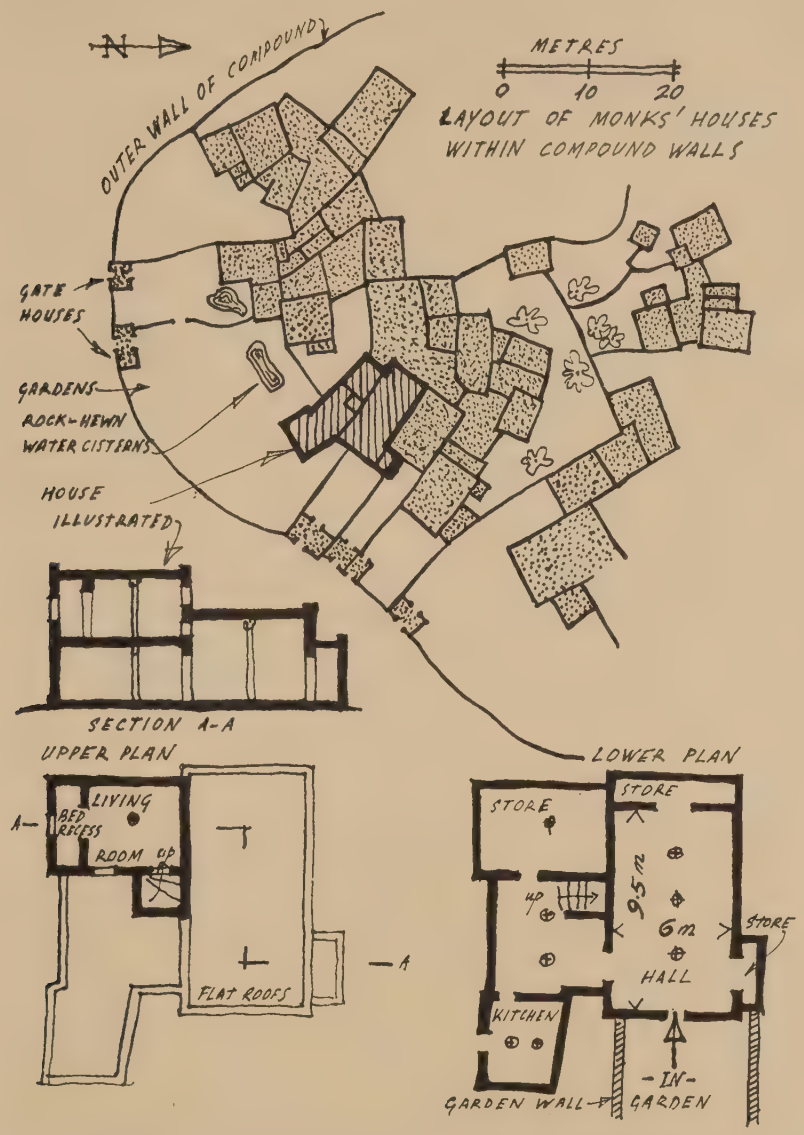


FIG. 2. Layout of houses, and plans and sections of a typical house, with its own garden surrounded by a compound wall with gates. Most of the houses are built back to back. (By courtesy of *Antiquity*.)

their hands and walk up the side of the cliff, using for a foothold small cavities which have been worn through centuries of use. A second rope is usually thrown down for

read aloud my letters of introduction, after each of which they clapped their hands. There was more music, followed by a prayer.

The preliminaries were now over; I hoped I had won their confidence, for this would make all the difference to the smooth working of the project.

visitors, who are hauled up by a group of monks happening to be at the top. The physical entrance to the monastery is made in the form of a gatehouse at the end of a ledge half-way up the cliff. From this gate paths lead up to the top of the plateau where most of the monastery buildings are situated, being grouped in the form of a large village (figs. 1 and 2) like others in the district.

The buildings are the normal stone houses with flat earth-roofs of Tigrai. Each monk has a house with several rooms, including an upper room for contemplation and prayer, and a walled garden (fig. 2). The spaces between the groups of houses and gardens form winding lanes leading towards the church, the meeting-hall and guest house, and the rock-hewn water cisterns. All the buildings are sited on the upper part of the plateau except for the small church (see Part II) which is built on a ledge below the top, one of the series of ledges on one of which is the gatehouse mentioned above. There are ledges slightly below the top at the south-west and north-west corners as well as those near the entrance.

The greatest length of the *amba* is approximately 600 m. along the NE.–SW. axis, and it is about 180 m. wide for half this length, broadening out at the south-west.

The church is surrounded by trees. The rest of the monastery is a bare grassy plateau with a few olives and eucalyptus. Olives and candelabra euphorbias hug the ledges and crevices in the cliff faces.

Civet cats, baboons, and grey monkeys come up over the side and play on top, and there are many kinds of birds, including crows, cranes, and partridges.

The top of the *amba* commands magnificent views towards Mai Aini and the Plain of Hazamo in Eritrea, to the ridge on the east where runs the main road between Asmara and Addis Ababa, and to the great mass of Amba Augher, and beyond Enticcio the fantastic shapes of the Adua mountains.

The Compound of the Main Church

This is a walled enclosure at the east end of the monastery (pl. I, *a*). Legends say that the church was built on the place where the founder of the monastery was deposited by the serpent (see the description of the foundation of the monastery). The curtain wall of this enclosure is about 3 m. high, and is of random rubble stone, with slits to drain the rain water from inside.

The main entrance to the church compound is a gatehouse having an upper room where drums are stored. There are other rooms adjoining. This gatehouse (typical of those in church compounds in the north of Ethiopia) gives on to the yard containing the church. The whole is full of tid, olive, and eucalyptus trees, which attract doves and other birds. Their sounds always contribute towards the extremely peaceful atmosphere of an Ethiopian church.

On the right of the entrance is a square bell-tower about 7 m. high, with a raised centre portion. Nearby, on the south side of the compound, is a secondary entrance to the yard, leading through a small walled enclosure outside the main wall. Near the bell-tower is a cistern hewn out of the solid rock, to capture rain water.

A short wall with an arched opening (pl. III, *d*) separates the front and back parts of the yard on the south side of the church. Immediately adjoining the church on its

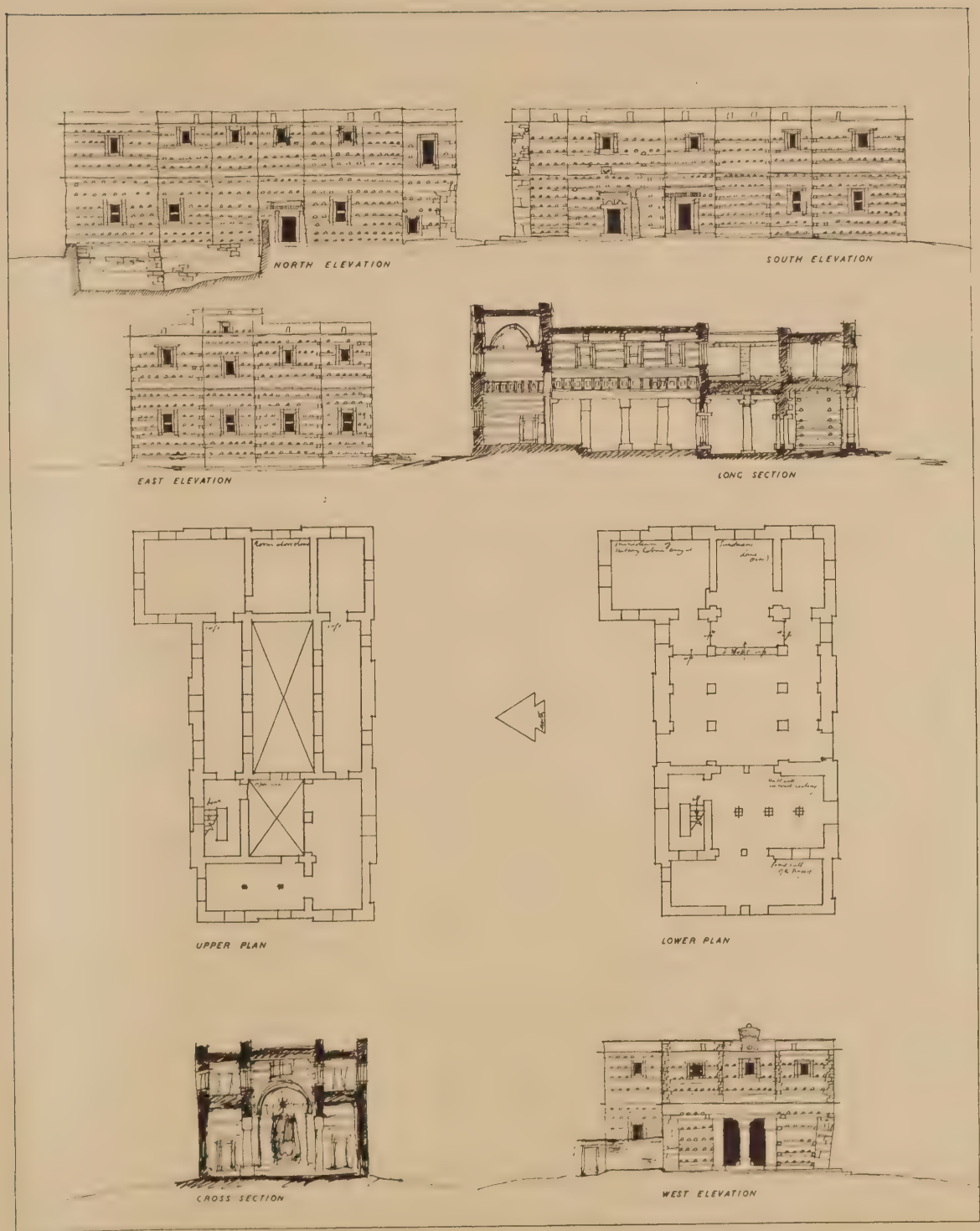


FIG. 3. Plans, sections, and elevations of the Large Church. (Approx. scale 1/300.)

north side is a low wall enclosing a rock-hewn cistern (pl. III, *b* and *c*). This contains water which has been blessed.

There is another yard immediately adjoining the church compound on the north side, composed of such administrative buildings as the treasury, and a small yard in which boys learn to chant in Ge'ez. It is here that the association of monks usually meets.

The Large Church (pls. II–VII, figs. 3, 4, 5)

If the building, which is approximately 20 m. by 9 m., is divided lengthwise into five parts, it will be seen that there is an upper floor over the two westernmost parts, and also over the portion containing the sanctuary and its flanking rooms. There are long lofts at first-floor level over the aisles. The nave goes up the full height of the building. The ceiling of the sanctuary consists of a small dome, 2 m. in diameter, with timber ribs, painted, the whole now covered with cloths (figs. 6 and 7, pls. IV, *a*, VII, *a*). It is not visible externally, being protected from the weather by a raised portion of the flat earth-roof (fig. 4).

Before 1946 the nave had a fine arched timber roof construction,[1] which became unstable and was replaced by the monks themselves with a flat beam and board ceiling and earth-roof before I arrived. I found portions of the former roof stored inside the gatehouse.

On the main axis, the west entrance (pl. II, *b*) leads into two wide vestibules. The first is a partly open porch (pl. VII, *c*), probably of later construction yet similar to the main body of the church; it has, in addition to the main openings facing west, a low door to the north. The second, the inner entrance hall, can be entered either from the first porch, or through a door in the south wall of the church. This compartment (pls. VII, *d* and VIII) has a fine carved panel ceiling (see p. 41), supported on three free-standing columns (figs. 8 and 9). It is not so wide as the porch, because part of the space is occupied by a staircase which winds round a block of masonry.

This stair is similar in design to the ones in the Axumite palaces, described by the German Axum Expedition. It consists of solid stone steps built on a rubble in-filling between the surrounding walls and the central masonry core. There are two short flights and a landing. Under the upper flight is a small recess which is used as a store. The landing floor level comes at the mid-point of a window opening between it and the entrance porch; this difficulty is overcome by the lower part of the window being filled in solid with a carved timber plaque, and openings in the upper half arranged to give on to the landing, these openings being small arches framed up in timber (pl. VI, *b*; fig. 11).

The staircase leads up to an inner, open light well, drained by a long *sabaluka*, or gutter outlet hollowed out of a log. This light well is over the central part of the inner entrance hall, and a window from it lights the nave at the west end. From this level the lofts over the aisles can be entered (fig. 5), and also rooms over the entrance porches, and over the compartments at the east end of the church, including the room over the sanctuary (fig. 4), which is filled by the volume of the dome.

[1] Buxton, *op. cit.*

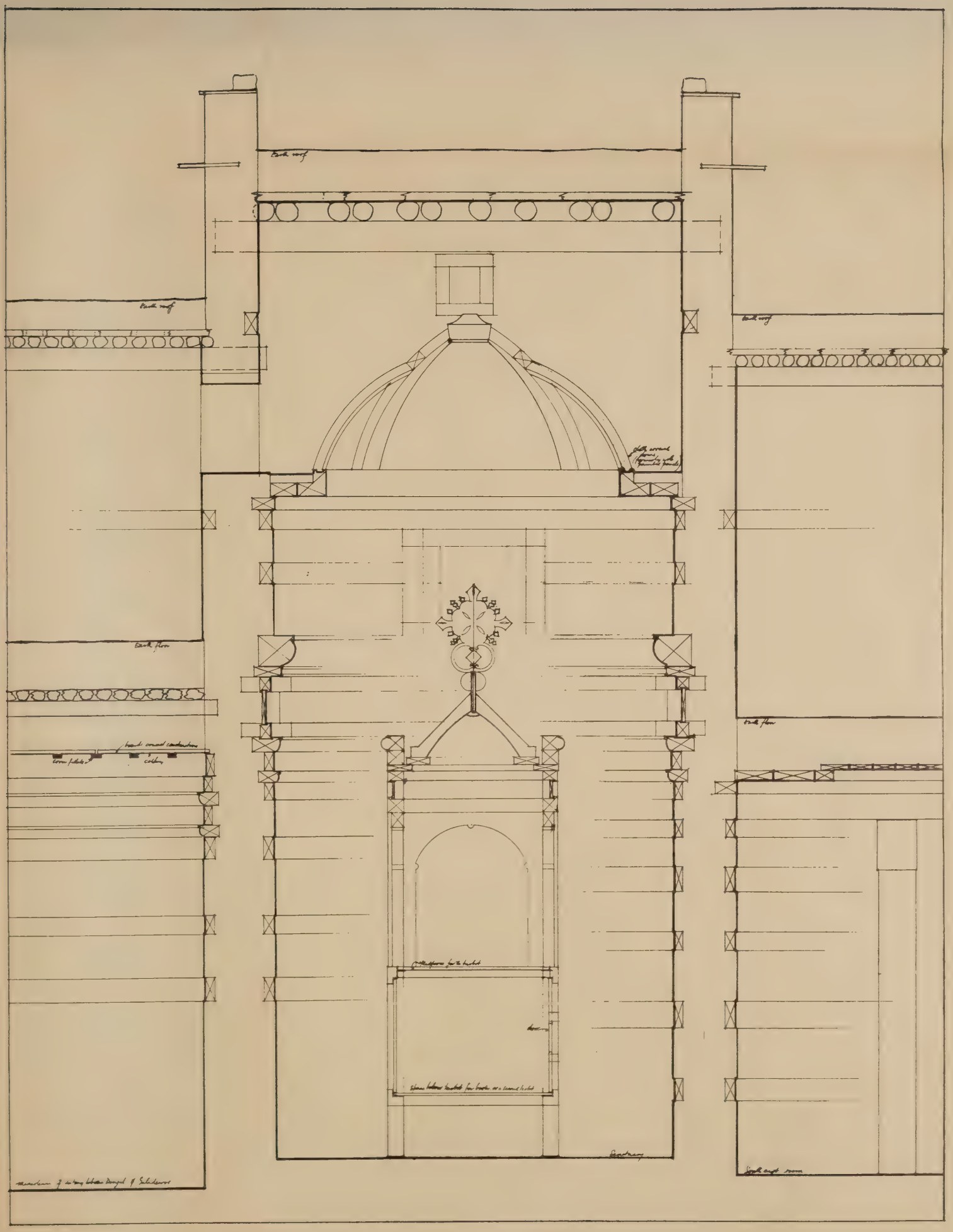


FIG. 4. Section through Sanctuary of the Large Church, approximate scale 1/30

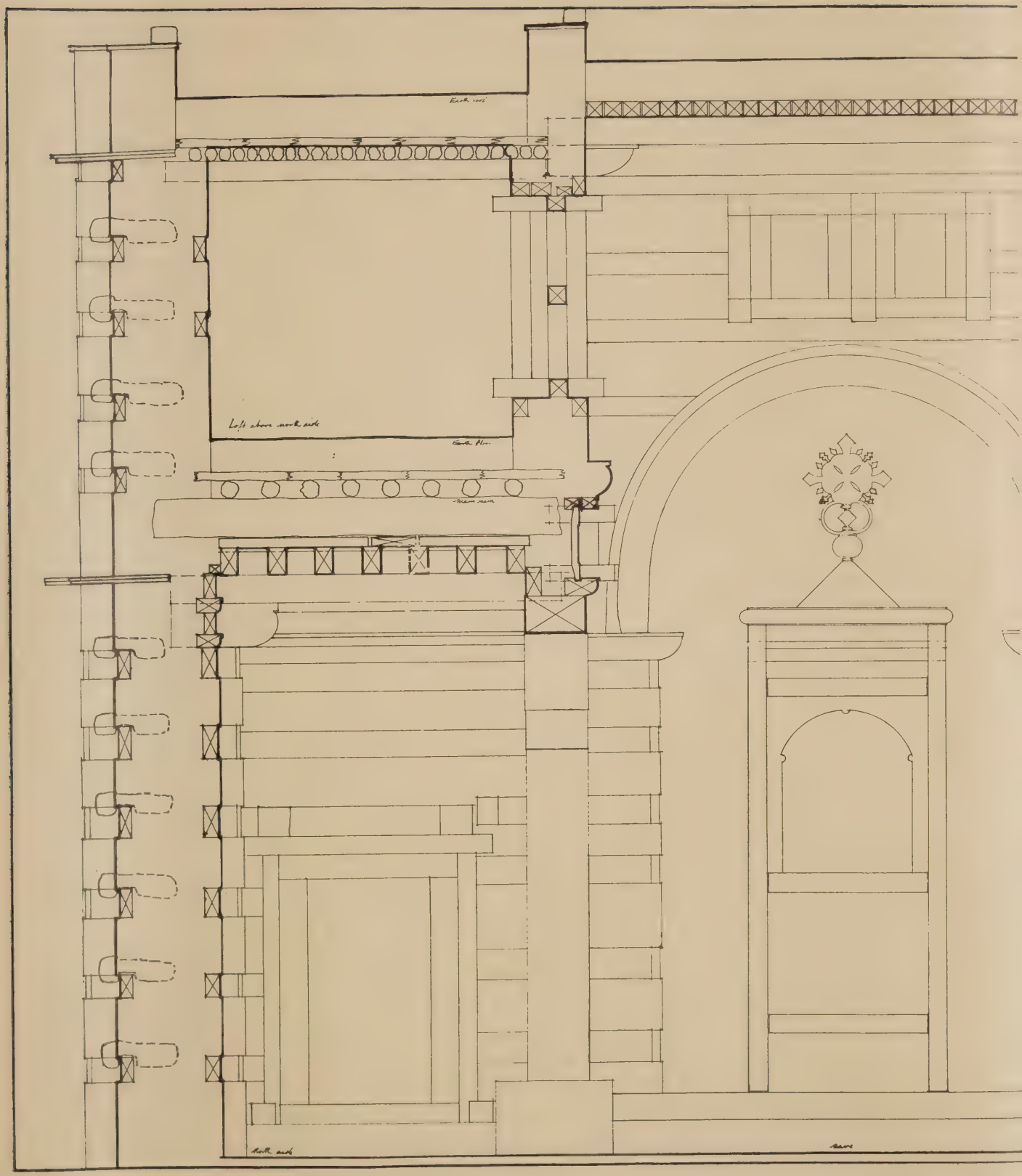
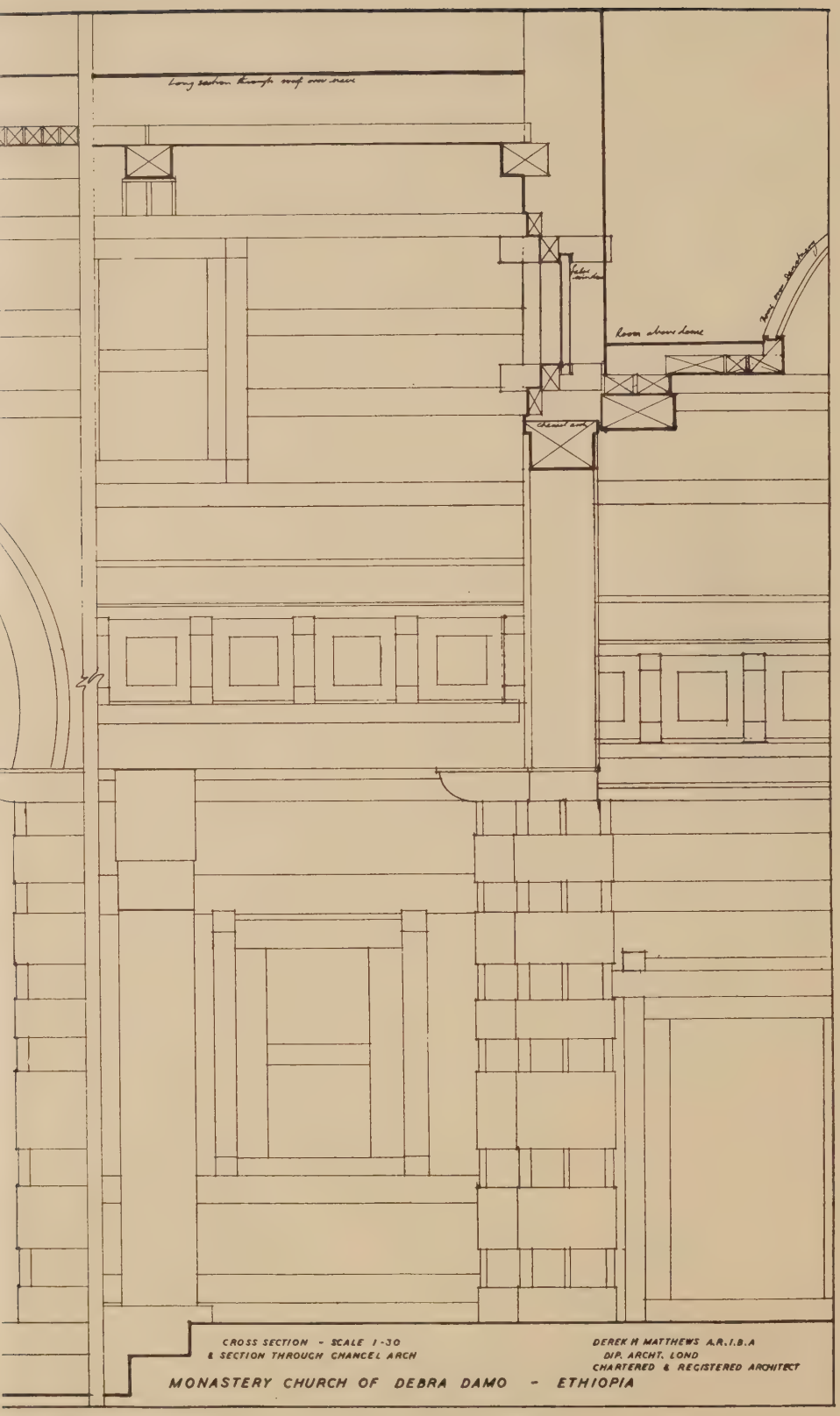


FIG. 5. Cross section through Large Church, and section through Chancel



Arch, approximate scale 1/30

Returning to the inner entrance hall from the staircase, it will be noted there are double doors in both its east and west walls, and a low external door on the south, as well as the opening into the staircase.[1]

The main part of the church can be entered either from the inner entrance hall, or through external doors in the north and south walls. This part of the church is lighted indirectly by means of small windows in the lofts over the aisles (fig. 5), and also by ground-floor windows in the aisles themselves, as well as by the above-mentioned window giving on to the light well. There is a dummy window between the nave and the room over the sanctuary, above the top of the chancel arch (fig. 5).

The nave is separated from the sanctuary by a wall with an opening formed of a carved timber arch (pl. v, *a* and *b*; fig. 5).[2] There are doors into the sanctuary from the rooms on each side of it, and a high window on the east wall (pl. iv, *b*). The side rooms can also be entered from the east ends of the aisles.

On the north of the sanctuary the room which contains the remains of King Lebna Dengel (1508–40)[3] projects from the main body of the church (pl. iii, *b* and *c*). This suggests that it might have been extended at a later date than the original building, because it is not part of the fundamental Axumite plan-shape. But this might not be so, as externally it looks like an integral part of the main block, and it is built on a base which is characteristically Axumite in design, described below.

The plan of the church is noteworthy for the unusual indentations within the thickness of the walls (fig. 12). This feature is yet another link with old Axumite building methods, for it occurs at the other Axumite sites in Ethiopia, and in a minor form it may be observed in the plans of the storied obelisks at Axum. The reason for the indentations may well be that the distance between them is a convenient length for the longitudinal timbers of the wall, whose ends are always mastered by a wooden quoin block, an architectural fake, making the beams appear thicker than they really are.[4] These quoin blocks always occur at the indentations, as well as the corners of the building.

The walls are constructed of tile-like stones set in excellent earth-mortar, with larger quoins of a different stone (fig. 12). There are traces of external plaster on portions of the wall that are protected from the weather by projecting slate cornices.[5] The monks said that the small stones come from Eritrea, where there is said to be still a heap of stone that was quarried for the building at Zabanbur near Adi Caieh. The walls of the church owe their preservation partly to the timber-work which stabilizes the wall structure. The effect is of a series of bands on the wall surface consisting of

[1] The height of the doors may be governed by the position of the horizontal timbers; the higher the door, the larger number of horizontals must be cut through, with consequent weakening of the structure. The monks believe that the doors are made low so that one must bow down (to God) when entering.

[2] Mr. D. R. Buxton found portions of a similar arch in the church at Aramo, which was in a state of collapse. He had the pieces moved to the museum in Asmara.

[3] I incorrectly stated in my article in *Antiquity*, xxiii, Dec. 1949, that the remains of Galawdewos, son of Lebna Dengel, are also at Debra Damo. His body is buried at Tadbaba Mariam, and his head in a church in the village of Anṣokiya.

[4] The diagram, fig. 349, in vol. ii of the *Deutsche Aksum-Expedition* is incorrect; compare with my fig. 12

[5] Mr. D. R. Buxton (*op. cit.*) observed that the built-up church of Imrahanna Kristos, in the Debra Damo tradition, has its stonework covered with plaster. This church is protected from the weather, being constructed inside an enormous cave, a day's journey north of Lalibela.

timbers approximately 15 cm. deep alternating with bands of stone of varying depth from 24 to 40 cm.[1]

The longitudinal timbers are fixed and kept upright by a series of cross-logs notched over them, and built into the wall. These cross-logs are known locally as 'monkey-heads'. A very few (not all, as was stated by the German Axum Expedition) pass through the wall, and are notched over the twin beam inside (figs. 5 and 12). The longitudinals are further tied together by means of the window construction and the quoin blocks (pl. IV, *d*; figs. 13 and 14). Olive wood is used for all constructional parts, except in the flat earth-roof, where euphorbia is used.

Window and door openings are both framed up in a similar way, and consist of a transverse timber passing through the wall at each corner, to which are joined the other members of the frame (pl. IV, *c* and *d*, and VI, *a* and *b*). These are often carved (fig. 15). Doors are generally low, and it is necessary to stoop on entering.[2] The tradition of making openings in walls in this way is still followed today in Northern Ethiopia.

The two windows inside the entrance porch (pl. VI, *b*, and VII, *c*; fig. 11) contain an infilling in their lower halves, each composed of a square panel decorated with incised ornament in the form of combinations of swastikas with crosses, a common motif of decoration in Coptic art (fig. 25). The upper half of each window consists of a pair of arches in timber. As described above, the northern window has the staircase landing at its mid-point, thereby explaining the two-fold subdivision. The southern window was probably made to a similar design for reasons of symmetry, for these windows were probably external ones if the porch was added at the west end.

The foundations of the church are based on the living rock of the *amba*. On the north side of the church the ground level is lower, within the small enclosure containing the holy-water cistern. Portions are visible of a stepped base, Axumite in design (fig. 3). It is stepped in three intervals, like those in the Axumite sites at Cohaito, Axum, Adigrat, and Yeha. The depth of these intervals from top to bottom is respectively 43 cm., 53 cm. and 1 m. The projections are only slight. This base is only visible on the northern side of the church where the ground is lower.

Slates project externally as cornices at both the ceiling levels. A parapet surmounts the wall, with slits to allow rain water to escape from the flat roof.

The roof and upper floors of the church are of the normal flat earth type usual in Tigrai (figs. 4 and 5). In unimportant positions, as in the lofts over the aisles, and in the upper rooms, the rough beams are exposed below. In the floors of the lofts there is a false ceiling (figs. 5 and 16) consisting of main beams, ceiling joists, and close boarding which masks the rough tree-trunk and log construction of the actual floor, and presents a clean finish to the ceiling as seen from inside the church. The ceiling to the outer entrance porch (pl. VII, *c*) is composed of boards laid diagonally across the corners of each square compartment, above which are other boards laid in turn across

[1] The Italians used such a horizontal motif in the new Coptic church in Asmara. This church has horizontal bands of brick which give an effect of timber; the gate-house is a copy of the Debra Damo timber technique. The 'Guida dell'Africa Orientale Italiana' describes it as a 'picturesque Italian interpretation of the Abyssinian style'. There is a modern grain store in Asmara with a similar use of brick and stone.

[2] See note 1 on previous page.

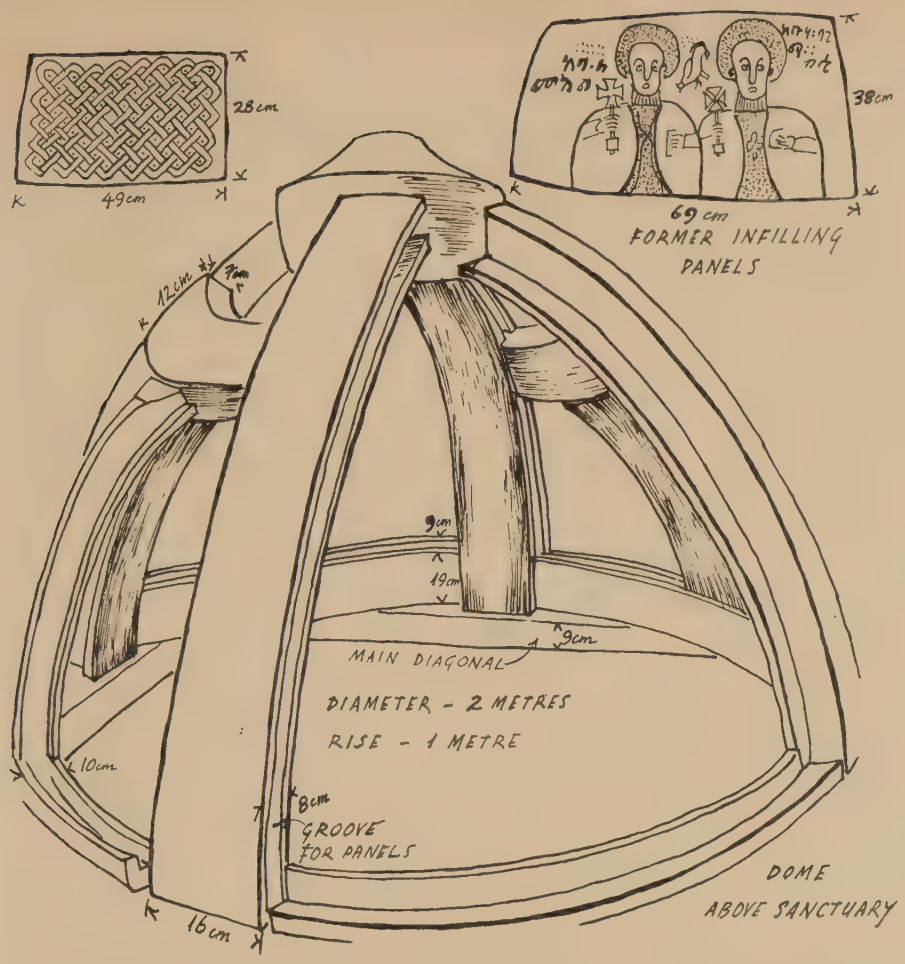


FIG. 6. Wooden framework of the dome above the sanctuary of the Large Church, and two of the former infilling panels (the dome is now covered with cloths). (By courtesy of *Antiquity*.)

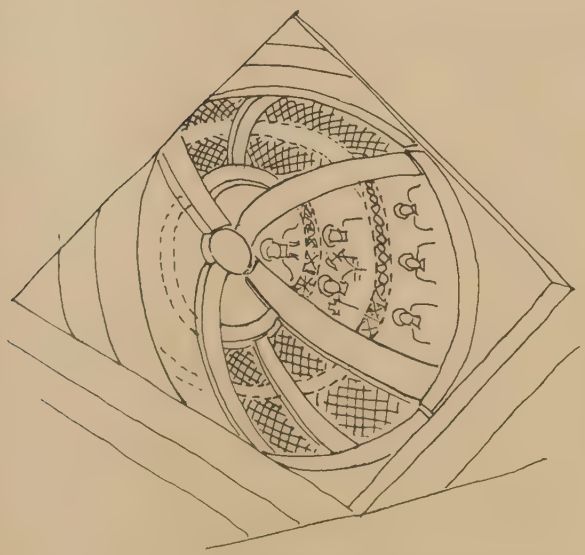


FIG. 7. Conjectural restoration of dome panelling.

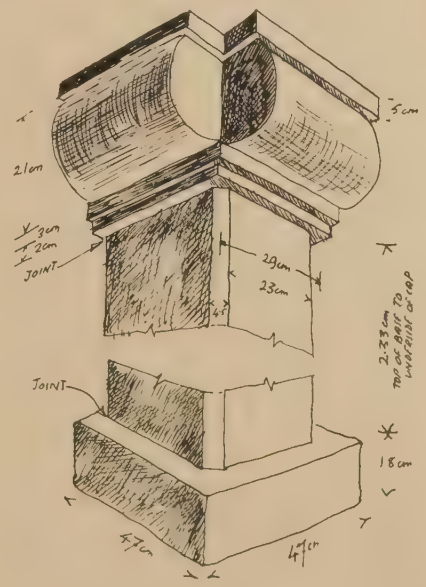


FIG. 8. Stone column, capital, and base, supporting the carved ceiling in the Large Church. (Compare with similar one in timber, fig. 9, and with the stone one lying outside the church, fig. 10.)

the corners so formed, thereby reducing the span, and carrying the heavy earth floor without the necessity for beams. Such diagonal roofing is frequently used today in Tigrai, and occurs also in the ancient rock church of Sokota, translated into stone. It only occurs in Debra Damo in the later extension, not in the original plan-shape, with the exception of the dome over the sanctuary which is carried on a not dissimilar arrangement of 'flat pendentives' (pl. IV, *a*, and figs. 4, 5, 6, and 7).[1] The ceiling in the inner entrance hall (pl. VIII) is composed partly of three groups of carved panels (described later), and partly of a beam and board ceiling with a high degree of finish. The ceiling over the nave, formerly supported on carved timber arches,[2] was replaced by the monks themselves with a flat beam and board ceiling before I arrived.

The dome over the sanctuary is 2 m. in diameter, and consists of four main ribs and two secondary ribs joined to the main ribs by a trimming piece (pl. IV, *a*, and VII, *a*; figs. 4, 6, and 7). The tops of the four main ribs are built into a heavy circular boss, and their bases rest on main diagonals or 'flat pendentives' 9 cm. thick. Between the lower ends of the ribs there are curved members, also grooved like the ribs, to hold wooden panels. These panels had been removed, and the dome ribs covered with cloths. Some painted fragments lying in the room over the sanctuary are obviously the former panels (figs. 6 and 7).[3] Some are decorated with a basket-work pattern of interlacing strips. Other panels have representations of saints painted in the Ethiopian-Byzantine style. The only recognizable piece at Debra Damo is approximately 40 cm. by 60 cm. and contains two head-and-shoulder portraits, carrying crosses, and a dove; in Ethiopian characters is written 'Abuna Samuel', 'Abuna Aragawi', 'Abuna Takla Haymanot', and 'Abuna Garima Bissa'. The monks told me that the paintings are not more than 200 years old. The dome may be older, as it is the practice in Ethiopia to repaint church paintings when they become indistinct. There are still painters working in the old tradition. The ribs of the dome are decorated with painted meander and other geometrical patterns.[4]

The chancel arch between the sanctuary and the nave (pl. V, *a* and *b*; fig. 5) is of timber, and is decorated with similar motifs to those in the frieze panels. The arch

[1] Parallels can be found in India for this form of construction. James Ferguson, *History of Indian and Eastern Architecture* (London, 1876) described the method in Jaina architecture of roofing with flat stone slabs. The simplest method consists of a single stone slab, but is limited in the size it can cover. The next step is to reduce the space by means of triangular stones placed in each angle of the square; by this means, the size of the central stone remaining the same, the side of the square space so roofed is increased in the ratio of ten to seven, the actual area being doubled. The next step in the process is by employing three tiers and nine stones instead of two tiers and five stones, and to quadruple the area roofed. Further, by using four tiers and thirteen stones, the extent roofed may be 9 ft. or 10 ft., always assuming the central stone to remain 4 ft. square. Ferguson's fig. 113 is remarkably similar to the central ceiling relief at Sokota (*Archaeologia*, xcii, D. R. Buxton, 'The Christian Antiquities of Northern Ethiopia', pl. XI, *b*) which is monolithic. At Debra Damo we find the same system used with timber, and the question arises whether there has been Indian influence there, or whether the solution was arrived at independently. The similarity also of Ethiopian bracket capitals with those in India, and the finding of Indian coins at Debra Damo reinforce the theory.

[2] Buxton, *op. cit.*

[3] Some panels are in the Colonial Museum in Rome and include portraits of Mika'el and Gabriel, as well as others. The style of script is not earlier than 1600, but the long noses on the portraits are characteristic of an early period of Ethiopian painting.

[4] One rib has strong resemblances to the ninth-century stone carved ribs in the museum in Ravenna, one of which has an interlacing basket-work pattern similar to the dome panel in fig. 6. Another rib is similar in detail to a pattern of the eighth to ninth century from Egypt (fig. 26, *d*).

springs from 'bracket capitals'.[1] Such a capital also occurs in both timber and stone in the inner entrance hall of the church (pl. VII, *d*; figs. 8 and 9), and there is a stone example, loose, outside the church (fig. 10). The patterns of decoration give every indication that the arch is contemporary with the frieze. The former arches in the nave roof have been described elsewhere.

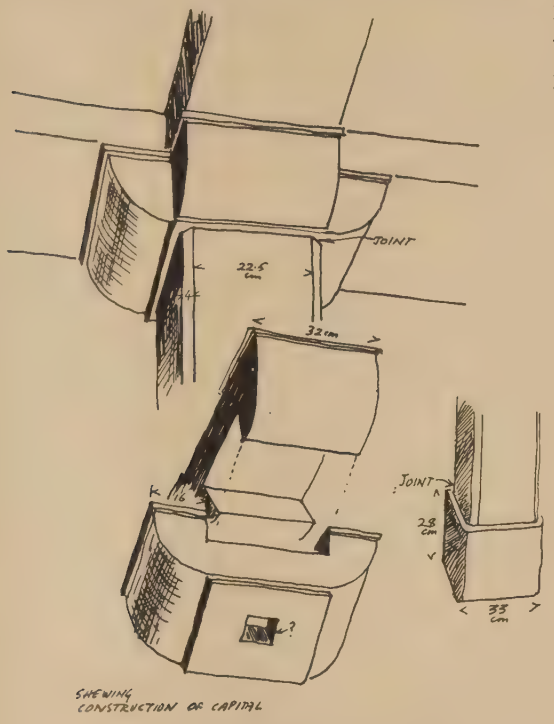


FIG. 9. Timber column, capital, and base supporting the carved ceiling in the Large Church.

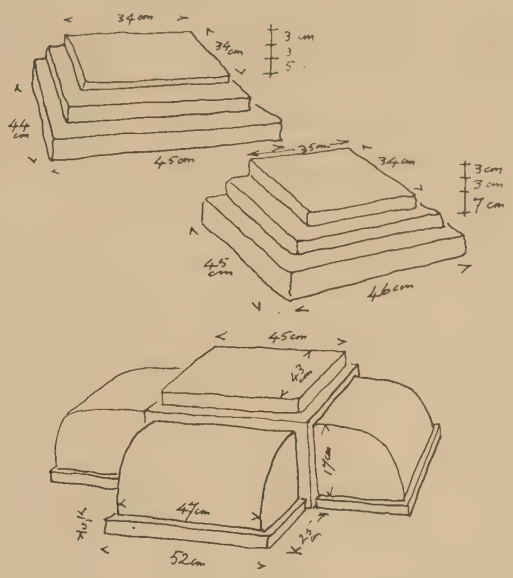


FIG. 10. Three stone capitals, of Axumite type, lying outside the church.

There are six monolithic columns in the main body of the church, supporting, together with an entablature and frieze, the wall at loft level (pl. VI, *c* and *d*). The columns are not all of the same size, and might have come from another building. They have rectangular capitals of varying depths, some of which are carved with incised decoration. One capital is carved on all four faces, one only on two faces, and two on one face. The remaining two are not carved at all, except in one case where a circular knob projects slightly. In the last the capital and shaft are in two parts. Some of the columns have chamfered corners. The ornament is of the same kind as in the timber panels and other carved features in the church, and could well have been applied to the capitals when they were built into the church if moved from another building or from an older building on the same site.

There is a stone column in the inner entrance hall supporting part of the carved ceiling, and having a separate capital and base from the shaft (pl. VII, *d*; fig. 8). The

[1] 'Bracket capitals' are a phenomenon occurring elsewhere in Ethiopia, and have been described by D. R. Buxton (*op. cit.*). The church in the Wadi el-Crema, Tripolitania (*Archaeologia*, XCV; J. B. Ward Perkins and R. G. Goodchild, *The Christian Antiquities of Tripolitania*, pl. XXV, *b* and fig. 18) although in stone, is reminiscent of these details in Debra Damo. The same paper illustrates other brackets carved with Christian ornament, from a church at Lepcis Magna (fig. 15). The Ethiopian brackets have a feeling more akin to those of Indian examples (see p. 12, n. 1 above).

capital is of the 'roll' type, and the base rectangular. Also supporting the same ceiling is a timber column with separate capital (in two parts) and base (fig. 9), and it is similar in design to the stone column. Such a bracket feature occurs also in the chancel arch (pl. v).

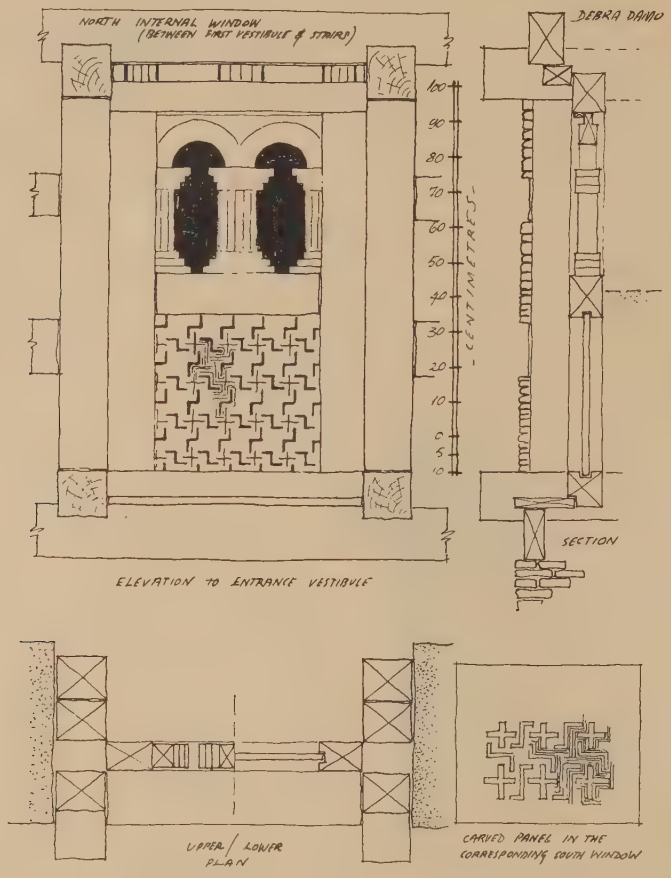


Fig. 11. North internal window, the upper part of which lights the stair in the Large Church.

In the centre of the main entrance, at the west end, is a stone column with a capital carved in a concave shape on two sides, and having a 'roll' base (pl. II, *b*). Flanking the openings on each side of this column are two monolithic columns similar to those in the nave, and attached to the walls. This part of the church was probably added later to the main block.

The nave and sanctuary are encircled by a wooden entablature whose metope panels are carved with combinations of swastikas forming crosses, and with plaited and meander decoration typical of Byzantine art (pls. v and vi, *c*; figs. 16, 17, and 18). Each panel is framed up with cross-beams in a similar way to the doors and windows in the church. The whole frieze is like a series of small windows filled with reliefs. Such a timber entablature has been translated into stone elsewhere in Ethiopia in

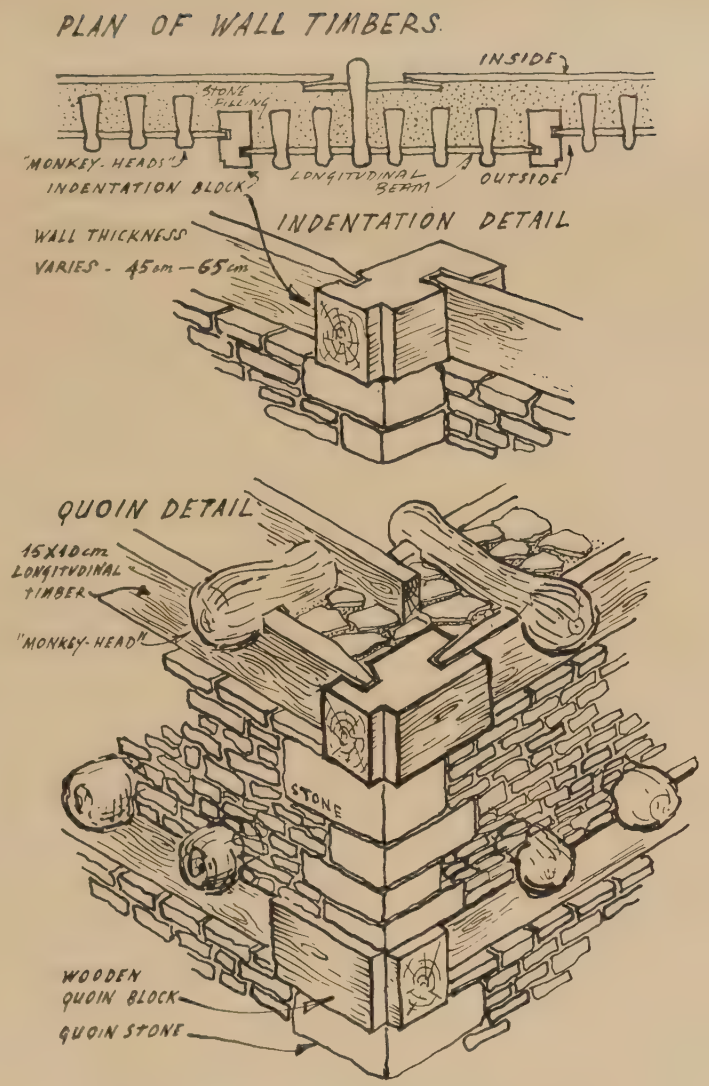


FIG. 12. Wall construction of the Large Church, showing arrangement of longitudinal timbers, 'monkey-heads', and quoin blocks. The inner wall of the Lower Church (fig. 28) is of similar construction. (By courtesy of *Antiquity*.)

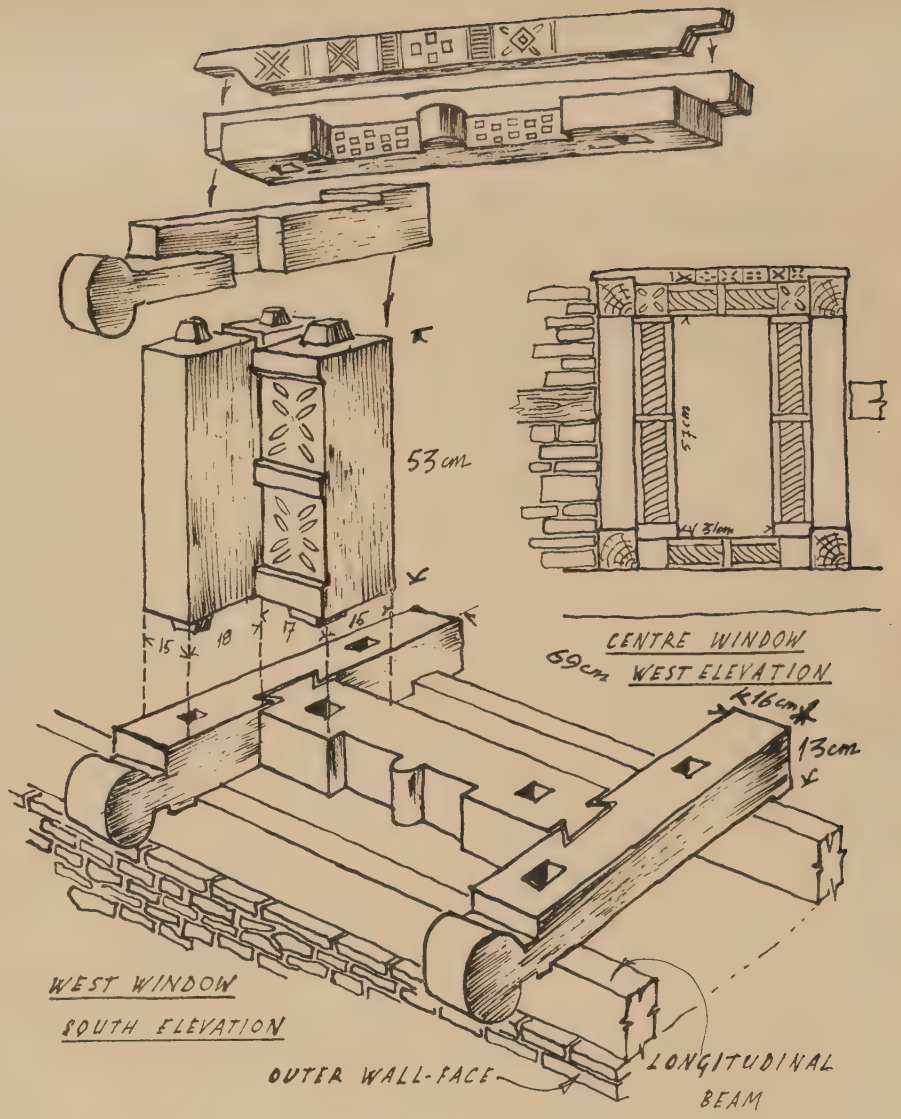


FIG. 13. Exploded view of a window in the south wall of the Large Church, showing construction and decoration. Also an elevation of the centre window on the west front. (By courtesy of *Antiquity*.)

the numerous rock-hewn churches.[1] In the nave, the entablature is carried on the monolithic columns described above; in the sanctuary it is applied directly to the walls. In the latter case the panels are constructed slightly differently from those in the nave (pl. IV, *a* and *b*, V and VI, *c*; fig. 16).

The average size of panels in the nave is 28 cm. by 24 cm., and in the sanctuary $20\frac{1}{2}$ cm. by $18\frac{1}{2}$ cm. The nave panels are approximately 4 cm. thick, and the incised decoration is 5 mm. deep. All are of a light brownish wood. The carving on both the nave and sanctuary panels is similar in character, and differs very much from the carved ceiling panels in the inner entrance hall, described below, whose subjects are mainly animal groups (pls. VIII, IX, X, and XI; figs. 19 and 20). (See Appendix, p. 41.)

The west end of the church is surmounted by a circular stone cap, 55 cm. in diameter (pl. II, *b*), underneath which is a stone plaque built into the wall, carved with a flower motif between two quadrants.[2]

There is a carved yellow sandstone block about 30 cm. square, of the same type of stone as the monolithic columns, and built into the gatehouse above the entrance. Outside the church, leaning against a tree, stands a shaped stone block 40 cm. high, said to be used as a seat by important visitors. The church compound also contains three monolithic capitals in the Axumite style, two being the stepped type, and the third the bracket type (fig. 10).

A number of objects are stored inside the large church, in the room adjoining the sanctuary on the north side. It is, in effect, a mausoleum, containing a coffin with the remains of King Lebna Dengel (1508–40). The room also contains a small baldachino, a simple wooden cross, and a fragment of a carved wooden panel depicting two animals biting something, in the same style as the ceiling panels. There are also two loose carved frieze panels, for which there was apparently no room in the frieze (fig. 18, F60 and F61).

All monks and priests carry a personal hand cross of steel or silver, approximately 23 cm. long. Fig. 21. 4 illustrates a common type. Hand crosses always consist of a head in the form of a cross, with secondary cross motifs at the extremities, a shaft, and a base which is usually rectangular, carrying an inscription. The ornamentation is still, in new crosses, the same type of interlacing geometric ornament as in the carvings in the church, indicating that the tradition is still alive. Sometimes the monks wear on a string round their necks small crosses of wood or silver (fig. 21. 5), together with perhaps a copper ear-pick, and a pair of tweezers used for removing 'jiggers', and some wooden beads. A fly-whisk is often carried, of black or white hair, sometimes having an ivory handle.

The *maqwamiya* (i.e. 'instrument for standing') (fig. 21. 1, 2 and 3) is a form of crutch used by the monks to lean on in the church,[1] and sometimes outside. It consists of a slender wooden shaft with a T-shaped top of silver or brass, decorated with the usual meander patterns, cross-patterns, and sometimes Solomon's seal. Sometimes a plain stick with a natural fork is used.

[1] Buxton, *op. cit.*; A. Mordini, 'La chiesa ipogea di Ucrò (Ambà Seneitì) nel Tigrai', *Annali dell'Africa Italiana*, ii, 2, Roma, 1939.

[2] Both are illustrated by Littmann, Krencker, and Lüpke (*op. cit.*), who have the plaque in their fig. 369 drawn upside down.

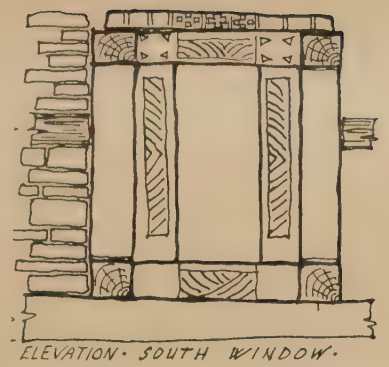


FIG. 14. Window in the south elevation of the Large Church.

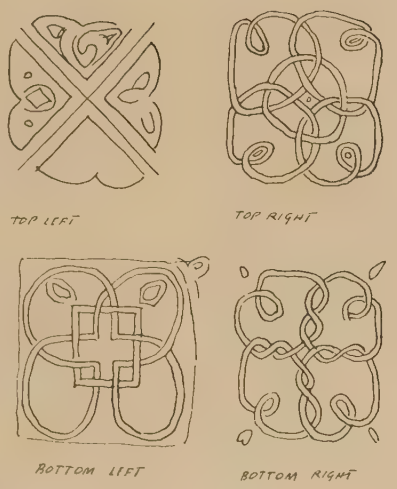


FIG. 15. Carvings on the ends of beams in the inner west door of the small church. Also on this door is a painting on canvas, including portraits of Abuna Matteos, Abuna Aregawi, and Abuna Josef.

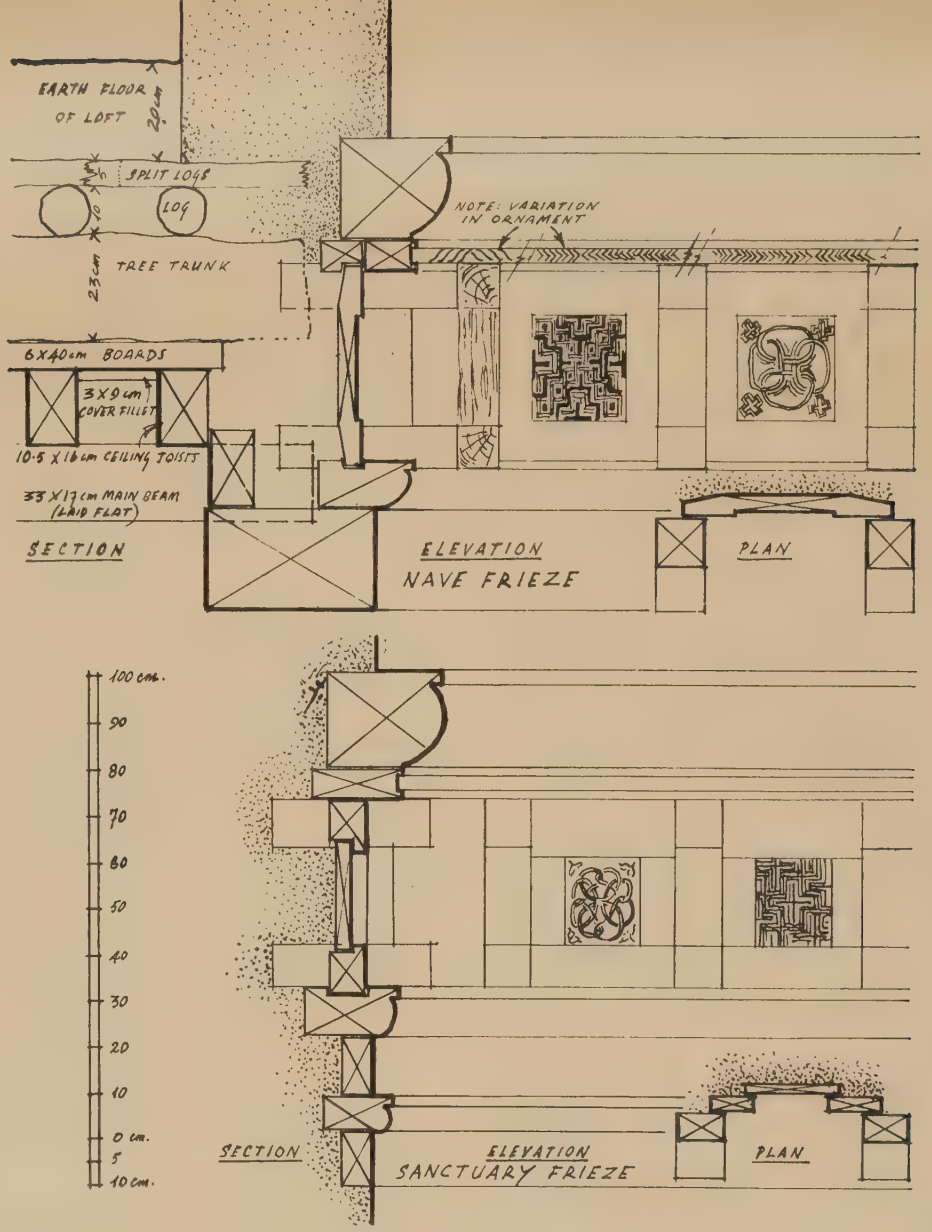


FIG. 16. Sections through the friezes in nave and sanctuary of the Large Church. The panels are differently constructed in each case. The section through the nave frieze also illustrates the floor construction of the loft above the aisles, which are supported on tree trunks 23 cm. in diameter, this rough carpentry being masked below by boards, ceiling joists, and a beam, forming a clean finish inside the aisle. (By courtesy of *Antiquity*.)

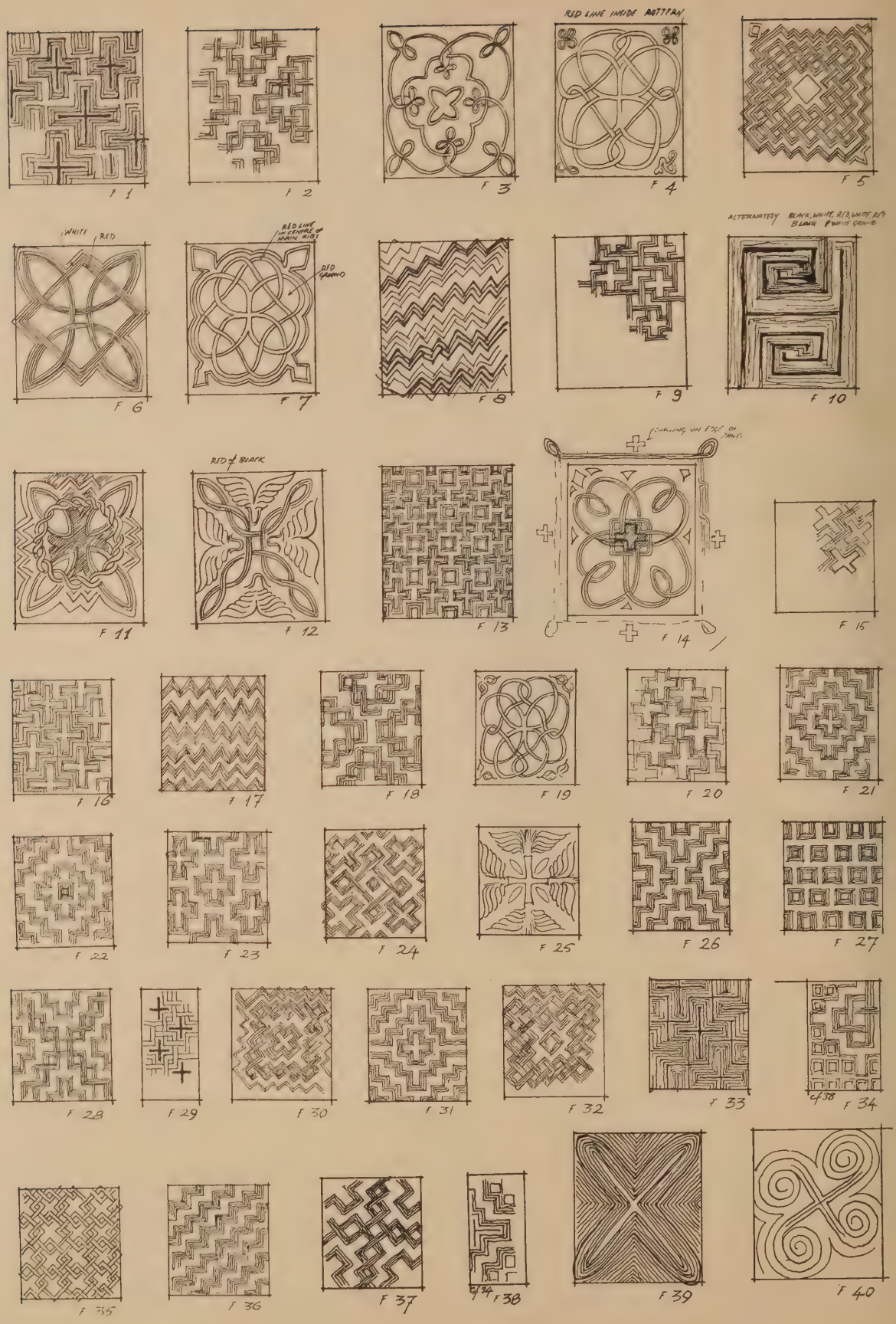


FIG. 17. Frieze panels in the nave and sanctuary of the Large Church. (Approx. scale 1/10.)

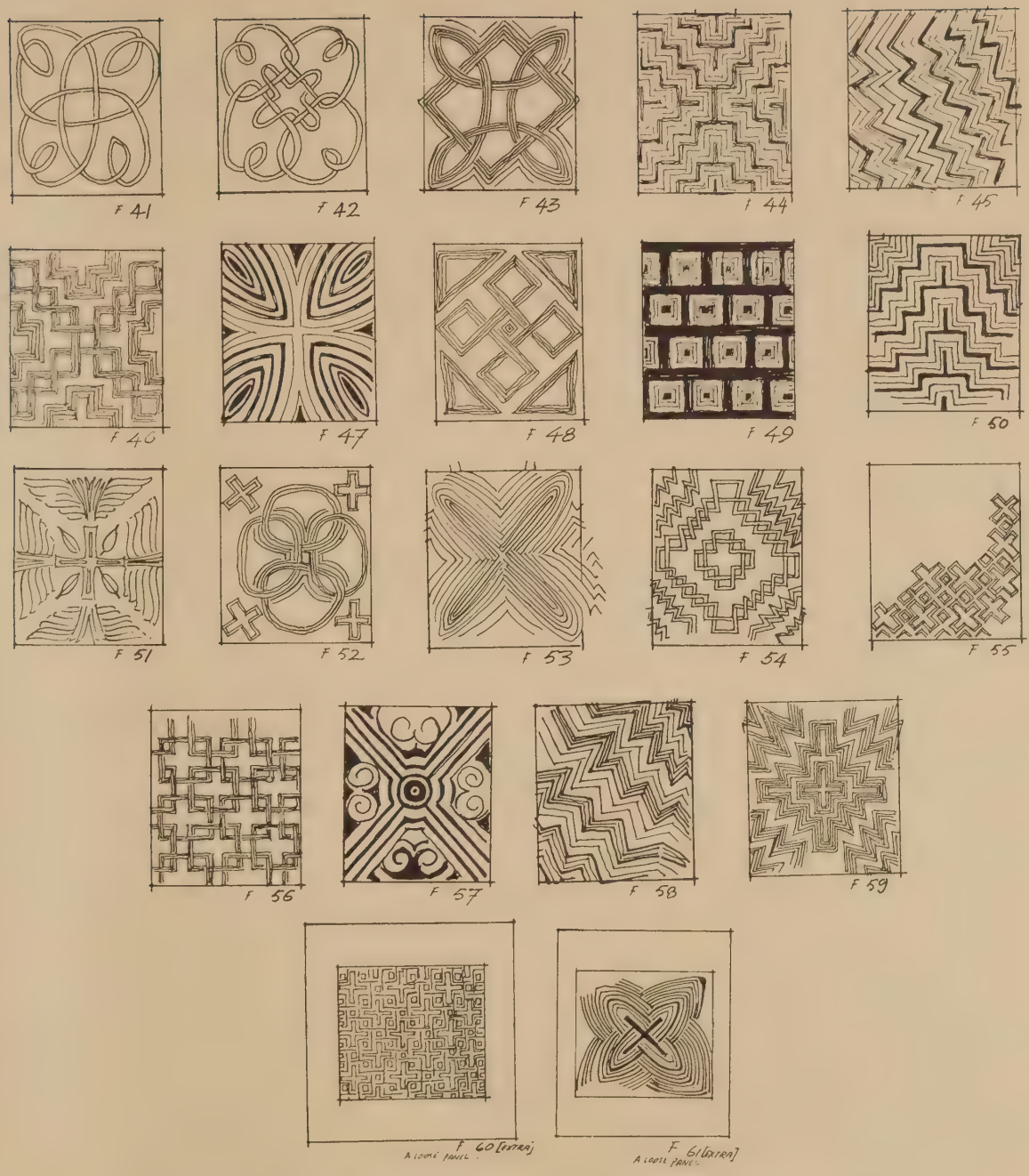


FIG. 18. Frieze panels in the nave of the Large Church. (Approx. scale 1/10.)

There are large crosses, in a similar style to the hand crosses, kept in the treasury, and used on ceremonial occasions.[1] One of these is fixed in the top of the baldachino which contains the *tabot* in the sanctuary (pl. IV, *a* and *b*; fig. 4); another, 43 cm. high, is in the praying house of the Second Association.

The *tabot* is the Ethiopic ark of the covenant. The original relic is believed to be the Ark of the Covenant of Zion itself, brought from Jerusalem to Axum by Menelik I, signifying the transfer for ever of the home of the God of Israel from Palestine to Ethiopia,[2] but every saint in Ethiopia has his own *tabot* which is thought to be the seat of the saint. The usual ones are simple wooden plates with carved decoration, consecrated to God or saint with the words 'This is the *tabot* of . . .'. The sanctuary of every church contains one. When it is removed from the church, the building becomes a shell without religious significance.[3]

The church is lighted by burning oil in wrought-iron holders, 1·80 m. high, whose points are driven into the floor (figs. 21. 8 and 9). There is also a wooden candle-holder 1·23 m. high, with a tripod base (fig. 21. 7), and a timber candelabra in the form of a cross (fig. 21. 6).

Two drums and a reading-stand for books are kept in the outer porch of the church (pl. VII, *c*). The drums are about 1 m. high and 35 cm. in diameter, formed out of a tree-trunk. The reading-stand is a simple iron frame covered with leather, and high enough for a standing person to read from it.

Pl. VI, *d* illustrates some of the instruments used in the church.

A feature of processions is the *debab* or umbrella. It is considered as a portable baldachino, and covers the *tabot* when carried. The older ones are on fixed frames, and ornamented with silk, silver crosses, figures of saints, and other fantasies. The most elaborate ones are red embroidered with gold. The umbrella in Ethiopia is used not only as a sunshade but as a mark of distinction, and it is in this sense that the elaborate form described above is used. In addition the priests carry folding ones, often in bright colours.

Other instruments used are the sistra, to accompany chanting and dancing, and the censers.

The interior of the church was divided by a large picture 2·7 m. by 3·25 m.; said to have been given to the monastery fifty years ago. At the top in the centre are representations of Mary and the Christ child, below which, lying, is the donor of the picture, Afa Mamher Gabra Medhin. On each side at the top are: (illegible), Raguel, Sacuel, Raphael, Mika'el; Gabriel, Fanuel, Suriel, (Sarafel), (Kirubēl), (illegible); below these are: Matthew, Jacob Wolde Iffius, Thomas, Jacob, Johannes, Peter; Endrius, Philip, Bartholomew, Tadeos, Natniel, Matteos. Below the representation

[1] On my first visit to Debra Damo, the monks had out all their regalia to receive me, as described above on p. 4, n. 1.

[2] This supposedly original relic, the Ark of the Covenant of Zion, is carried in procession at the annual feast at Axum on the sixteenth day of the Ethiopian month of Miasir (24th April). The old crowns of past Ethiopian Emperors are also brought out on this occasion. Whilst the Ark is carried round in the presence of the Nebura'ed (chief priest in Axum), music is played on traditional Ethiopian instruments, and *dabtera* do the dance of David.

[3] On my first visit to Debra Damo, I was not allowed, on the first day, to go beyond the door into the nave. That night the priests removed the *tabot* from the church and put it in the treasury. The following morning, when I got to the church, every door and window had been opened, and I was allowed to go in and out of every part as I liked, including the sanctuary.

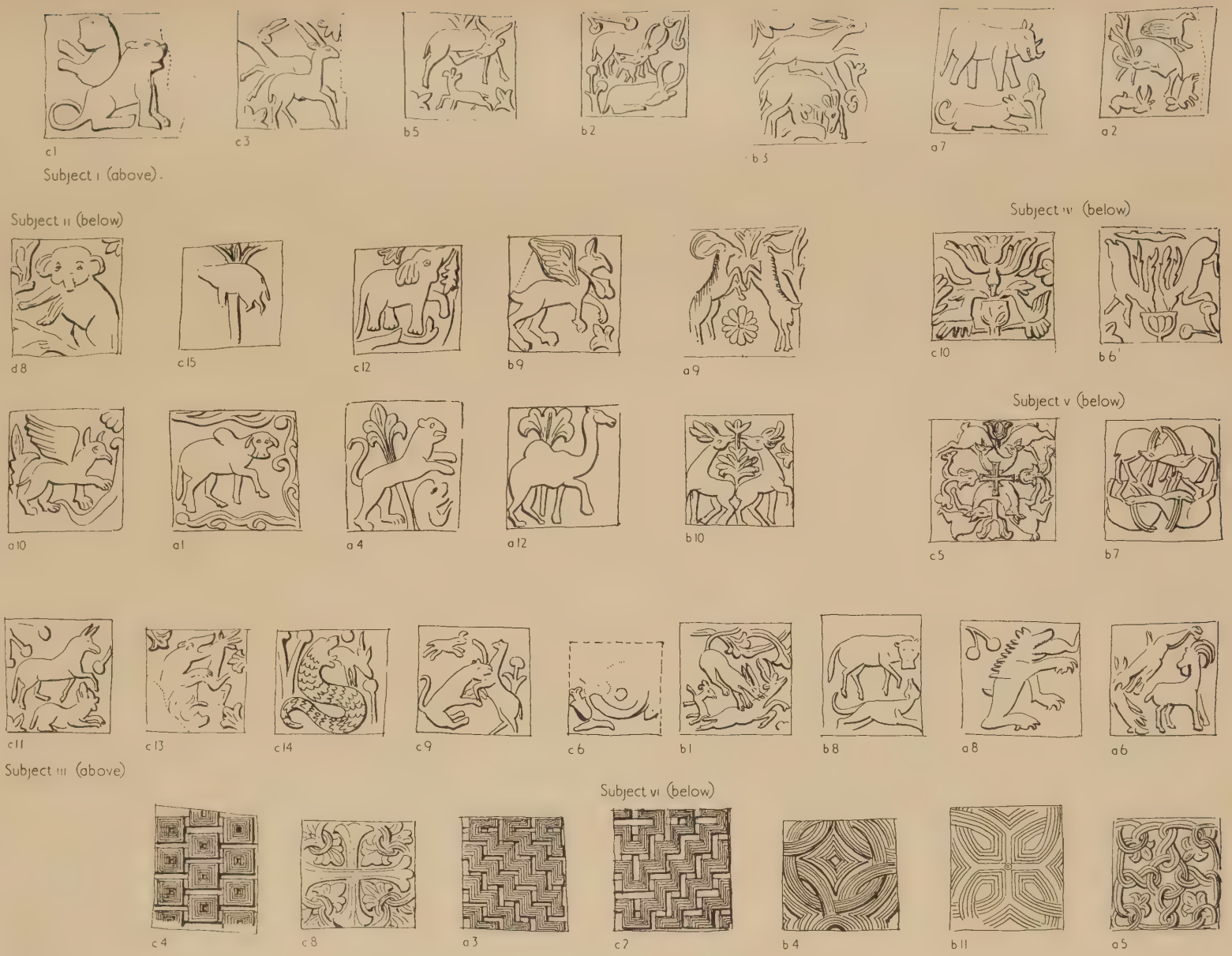


FIG. 19. Ceiling panels in the Large Church.

of the donor are Joseph, Christ, Salome, and Mary. On each side of them Abuna Ewostatewos, Abuna Takla Haymanot, and Abuna Za Mika'el Aragawi, Abuna Garima. The bottom row contains St. George, Burra Towit, St. Fikitor, St. Manadlios, St. Mercurios.[1]

There is another modern picture illustrating the foundation of the monastery.

There are no wall-paintings in the church at Debra Damo. This may be partly due to the fact that the wall surfaces are broken up by the longitudinal timbers. In any case, the carved decoration is too rich for paintings to be effective.

The treasury contains a copy of the *Fethar nagast*, or Judgement of Kings, a collection of canon law, drawn up in the twelfth century by a Copt, and translated into Ge'ez. This copy was given to Debra Damo by Dedjajmatch Wolde Gabriel, and is a very large leather-bound book. There is also a copy of the *Dowitt*, with coloured drawings and titles. Small copies of this book, without illustrations, are carried by all priests, and frequently read. This copy once belonged to Ras Mika'el, who gave it to Debra Damo. There is a note in the back saying that 'anyone who sells it shall be cursed by Peter and Paul'.

The Lower Church on the Ledge (pl. I, *c* and XII; figs. 1, 15, 28)

There is a second church on a ledge below the top of the amba, south of the large church, at the place where the founder of the monastery, Abuna Aragawi, is reputed to have vanished. This is described by Professor Mordini in Part II below, see p. 43.

Miscellaneous Buildings, Furniture, Water-supply, &c.

The eating-hall and guest house is a large house situated centrally on the *amba* (fig. 1). It is similar to the standard house (fig. 2), but larger, with two rows of columns in the main hall. This building is the one in which the German Axum Expedition was received, and which they described as the 'House of the Abbot'. On my first visit I was received here, and slept in the upper room. The main kitchens of the monastery are attached, and when the monks eat together, they do so here, but they usually eat independently.

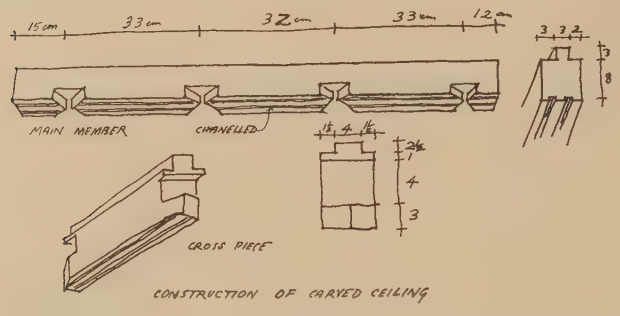


FIG. 20. Constructional details: the carved ceiling in the Large Church.

The houses of the monks are grouped irregularly in a series of ten compounds (figs. 1 and 2), which include gardens, and whose outer walls are pierced by gate-houses giving on to the lanes which intersect the groups, or on to the open top of the *amba*, if facing outwards. Each monk of the 'First Association' is provided with a house consisting of a hall, approxi-

[1] A modern copy of a fourteenth–fifteenth-century large painted hanging. See A. Mordini, 'Un'antica pittura etiopica', *Rassegna di Studi Etiopici*, xi, Rome, 1953.

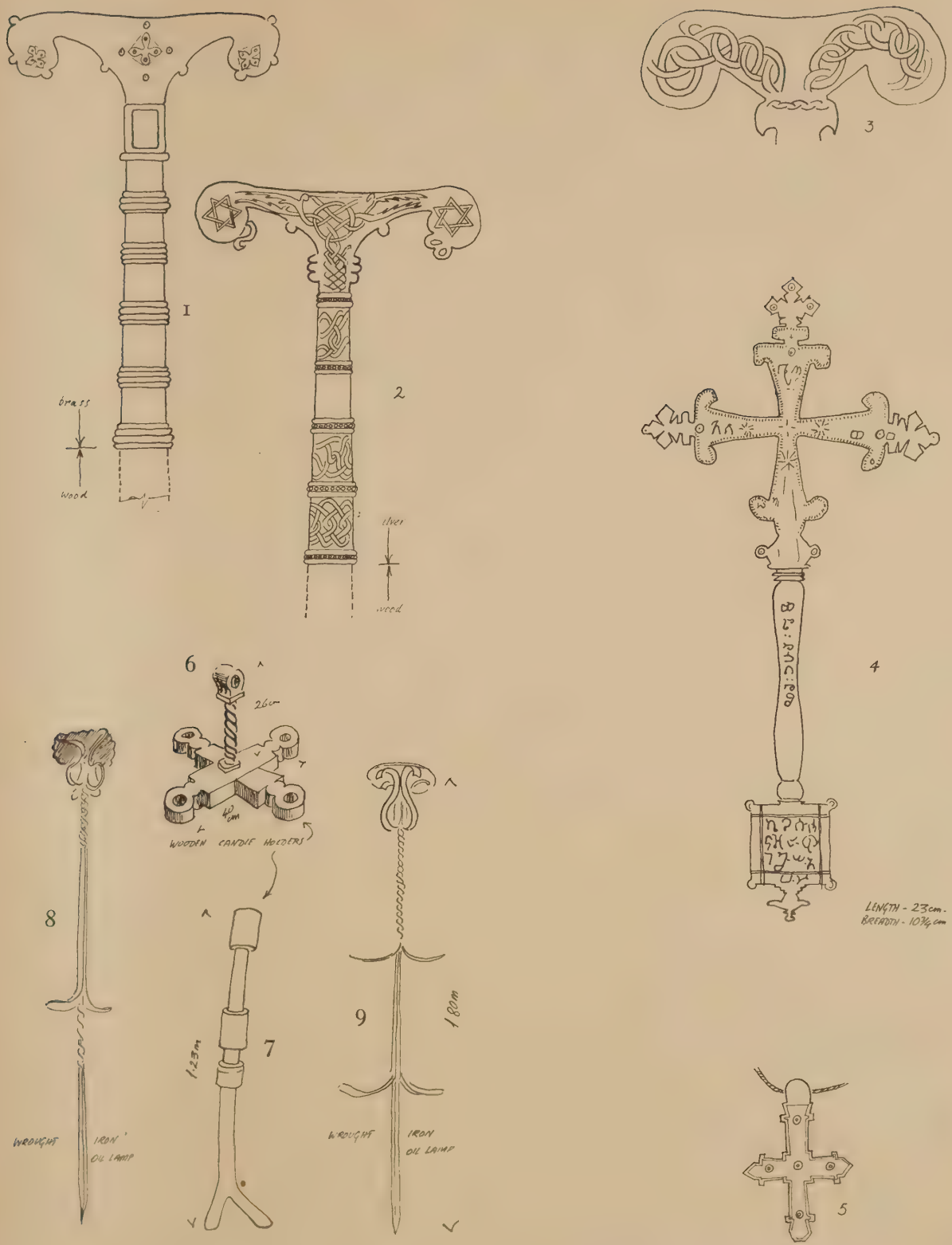


FIG. 21. 1, 2, and 3. The *Maqwamiya*, or crutch. 4. Typical hand-cross. 5. Necklace cross. 6 and 7. Wooden candle holders. 8 and 9. Iron oil lamps.

mately 6 m. by 9·5 m. Central columns of timber support the roof, which is pierced to allow the escape of smoke from the fire. There are usually one or two shallow stores opening off the hall, for the storage of *talla*[1] pots and other utensils. The hall is entered from a small garden. Opening out of the hall is a large lobby with timber posts carrying the roof; from this compartment one can enter the main store room and the kitchen, which will probably have an external door giving on to a garden. Outside there will be a rock-hewn cistern for water-supply. A crude staircase leads from the lobby to an upper room over the main store. This is the sleeping-room, which the monk also uses for contemplation and prayer. It has a recess for a bed, and low shuttered openings giving on to the flat earth-roofs over the lower rooms. This arrangement is the basic unit of house design, and is only varied according to the exigencies of site planning. The style of building is similar to that in surrounding villages.

The barn-like halls of the houses, with their three tree trunks supporting the timber and earth-roof, have a fire in a hollow in the middle, billowing out smoke which fills the room and blackens the beams. There is a recess at the far end from the door, and another in one of the long walls, both contain the ample forms of wicker-covered earthenware *talla* pots. There is a row of wooden and sometimes horn spikes all round the wall for hanging. There are some low wicker tables and one or two small stools for feasts, a bulbous *mukamutgenhii* for resting a large *talla* pot, and in the corner, a lot of *talla* cups.

The houses are furnished with a few articles. In addition to their *angareebs*[2] the monks have various types of small stools and chairs, constructed on the *angareeb* principle (fig. 22), of crude yet decorative design, usually with seats of interwoven leather thongs. Some of the stools have a low back, in one piece with the legs. Chairs have backs of boards decorated with saw-cuts forming open patterns.[3] The uprights may be held together with a leather thong. An extremely refined stool in the church has turned legs and a seat of closely woven thongs (pl. VI, *d*). There is an elaborate stool with a back and one side in the Palace in Adua, decorated in the same style as the churches.

The monks eat the usual Ethiopian food of *engera* and *wat*, and frequently have meals only of cooked beans. They sometimes grow food in the gardens attached to their individual houses. They drink *tedj* and *talla* out of horn cups, and beans are served hot on wicker plates. The monastery possesses an assortment of European crockery, which I was offered.

They cook in the monastery kitchen with a huge iron pot, and also have a large copper pot needing repair. There are the usual circular pans for making *engera*. The pots have charcoal fires under them. In one of the kitchen store rooms is a large pit in the floor, 8 ft. by 6 ft., which is used for storing grain. Nearby is a row of querns. In an adjoining room are many big wicker baskets, 1·5 m. high, plastered with mud, and used to store the materials for making *talla* and *tedj*.

[1] *Talla* is locally made beer. They also drink *tedj* which is a mead made from local honey.

[2] *Angareeb* is a locally made bed of ropes or leather thongs and timber, used also very widely in the Sudan.

[3] This principle, the formation of a pattern by means of saw-cuts, is common in the Red Sea area. It may be seen *par excellence* in the grilles of Suakin (D. H. Matthews, 'The Red Sea Style', *Kush*, i, 1953 and *Kush*, iii, 1955, Journal of the Sudan Antiquities Service).

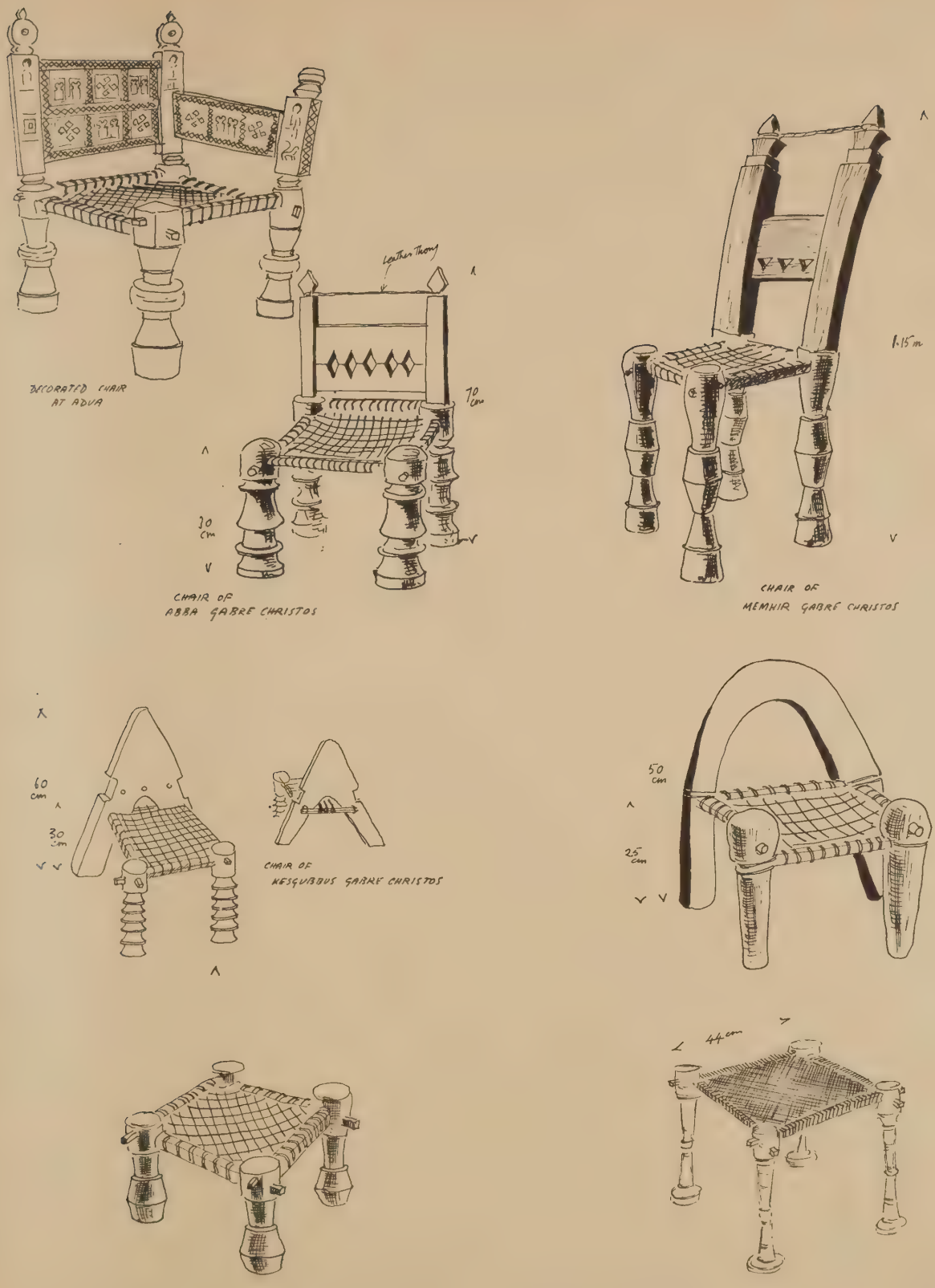


FIG. 22. Chairs and stools in the houses of the monks.

The water-supply for the community is stored in rock-hewn cisterns which fill up during the rains. A green weed called *sarbart* grows on top, completely covering the water. They said that when this is growing, the water is pure. There is a group of these cisterns in the centre of the monastery (fig. 1), as well as individual ones in some of the gardens. The supply seems to last during the dry season. I used this water myself and suffered no ill effects from it.

On top of the *amba* are two small enclosures, walled in an irregular rounded way, used to pen cattle which are hauled up the cliff and allowed to graze on top before being killed for feasts.

There are numerous caves in the rock wall adjacent to the small church (fig. 1); they are used both as graves for the monks and as burial places for people from outside.[1] One morning, a procession carrying crosses and a censer preceded by the *debab* went tinkling in a pungent cloud of frankincense over to the gate, all in their coloured robes. Below the rope were crowds of people mourning, as a body was brought up on an upturned bed covered with red and yellow cloths, to be buried on the holy top of Debra Damo.

Professor Mordini has described[2] what is probably a hermit's cell in the highest wall of the *amba*, on the north-west side, about 40 m. below the top, and 200 m. above the base of the cliff. There are signs of some steps, and a small rectangular opening, undoubtedly worked by man. For lack of a suitable rope, it was not possible to investigate this.

The *Deutsche Axum-Expedition* described some graffiti carved on the rock near the rope, probably cut by pilgrims.

No women are allowed on the top of the *amba*, but there are some modest buildings at the base of the cliff where nuns are living. They use the nearby church of Kidané Meret, whose entrance has a central column like that of Debra Damo, and this church is similar to the one in the village of Adi Gorundati.

In 1948 there were said to be about 300 monks residing at Debra Damo; at one time there are reputed to have been 1,000. These figures do not include the laymen, and the boys who come to learn Ge'ez and to chant. The monastery is thus a place of study as well as prayer. The community is divided into two parts: the 'First Association', consisting of the landowners and people of the surrounding districts, and the 'Second Association', composed of those who come from a distance. The Second Association is very poor, and if a rich person joins them he has to give all his wealth to the Association, for they share everything they possess. When the monastery receives food or money or gifts, it is distributed in the proportion of two-thirds to the First Association and one-third to the Second, although the members of the latter are more numerous.

The monks of the Second Association live communally, and share small rooms or cells, not having houses as do those of the First Association, who are more individualistic. The Second Association has a small chapel or praying-house, not containing a *tabot*, in which they pray all day. It is a square building with a central post, and

[1] Described in Part II by A. Mordini.

[2] A. Mordini, 'Informazioni preliminari sui risultati delle mie ricerche in Etiopia dal 1939 al 1944', *Rassegna di Studi Etiopici*, iv, 1946.

some paintings of Abuna Aragawi and the Serpent, and St. George, and Mary, and it contains a good silver cross.

The monastery owns houses in the surrounding towns and villages for the use of monks in their duties in the outside world. One of the main duties is that of *danya* or village judge.

Before the Italian occupation the monastery collected dues from the district. These payments were abolished by the Italians and replaced with government aid. With the change of government after the war, the system reverted to the former method. When I was there the monastery was having difficulties in collecting its dues again from the farmers.

The following ecclesiastical titles were in use at Debra Damo.[1]

1. *Mamher* ('teacher'). The abbot of a monastery or superior of an ecclesiastical college or other community (at Lalibela he is the principal ecclesiastic, with jurisdiction over all the churches, clergy, and monks). The title is also popularly given by courtesy to any ecclesiastic with scholastic attainments.

2. *Abba* (Aramaic—'father', cf. Ge'ez—'ab', Amharic—'abbat': the same word as Abbot, which came into English from Aramaic via Greek). It is not a rank or office, but simply a courtesy title given to bishops (in their case more often Abuna), Superiors of monastic communities, etc. (Mamher Heruy at Lalibela was usually called Abba Heruy). It is only used with the personal name following: one cannot say 'Mamher Heruy is the (or an) Abba', but one can say 'Abba Heruy is the Mamher'.

3. *Halaqa or Alaqa*. Tigrinya and old Amharic. This title can be used (i) for the incumbent or senior priest of a church or parish, (ii) for the Superior of a monastery, (iii) for any learned ecclesiastic (in which connotation it is probably superior to mamher, illogically). If there is both a Mamher and an Alaqa (in sense ii), then the Mamher is possibly the scholastic head, directing studies, and in nominal control of the monks as regards discipline, etc. (see 4, Afa Mamher), while the Alaqa is the head of the clergy: he would be supervisor of church services and ceremonies, and would assign the priests, deacons, and dabtara their respective duties.

Alaqa was also formerly a military title; it survives in the form 'shalaqa' (shi-alaqa), commander of a thousand (i.e. major).

4. *Afa Mamher* ('mouth of the Mamher'), (cf. Afa Negus, the Emperor's representative in the Imperial Law Courts). He is the 'vicar' or 'procurator' of the Superior; he acts for him in routine matters, enforcing discipline, dealing with complaints, settling disputes.

5. *Qes Gabaz*. Sometimes simply 'gabaz', 'qes' means 'priest'. He is the senior priest, charged with the material upkeep of the church or monastic establishment; he plans and supervises the repair of existing buildings and the construction of new ones; he looks after the vessels, vestments, etc., and also the supply of bread and wine for the Eucharist (see also 6).

6. *Magabi* (participle of the verb 'maggaba', to feed), he is the steward, responsible for all the catering arrangements. It is possible that the title could be confused with the word 'mazgabi', for 'treasury', possibly being applied to the treasurer, in the same way that 'wat-bet' (cook-house, kitchen) is regularly used for 'cook'. It is likely that the gabaz would be in charge of the treasury, but in a large establishment there might well be a special official.

[1] The head of the monastery on my arrival in 1948 and during the work of restoration was Mamher Gabra Christos, but owing to his age and bad state of health the duties were being carried out by Mamher Wolde Mariam. Other officials in the monastery were Afa Mamher Musguba Selassie, Qes Gabaz Gabra Christos Zemanfeste Kudas, and Magabi Gabra Jesus.

7. *Gwetai or Getai.* The Tigrinya form of the Amharic 'getaye' or 'getoch' (polite plural), and is not a title, but rather a term of respect applied to anybody. In ecclesiastical circles the form 'geta' occurs, not alone but in compound phrases, indicating grades of 'dabtara' (lay clerk, choirman), viz.

marigeta = leader of the chant.
qangeta = singer of the right.
grageta = singer of the left.

LEGENDS, FOLKLORE, AND KING LISTS

1. *The legend of the foundation of Debra Damo*, as related to me at Debra Damo by the Head of the monastery, Mamher Wolde Mariam:

'Abuna Aragawi was one of the nine Saints who went to Axum. After they had been there some time, they decided to go out separately to different places to spread Christianity in Ethiopia. Abuna Aragawi came to the flat-topped mountain where the monastery now is, and wished he could climb the cliff and live on the top. A serpent told him that there were only birds and the sun on the top, so Abuna Aragawi prayed, and the serpent reared itself up and placed the Abuna on the top. Whilst this was happening the Archangel Gabriel stood by with a sword ready to slay the serpent if it should attack Abuna Aragawi. When the Abuna went up he dropped his cross, and it fell on the stone which is today kissed by all who enter or leave the monastery. The place where Abuna Aragawi found himself is where the sanctuary is today. The Abuna then asked Hatsay Gabra Maskal to build a church, which he did.'

2. *Translation out of 'Gadla Abuna Aragawi'* (Work of Abuna Aragawi), a book in possession of the monk Gabra Giorghis (translated by Ato Haile Zarrafa). (See p. 52, note 3.)

The building of the church of Debra Damo. Gabra Maskal sent his army to collect materials and workmen with knowledge; he sent to the north, east, south, and west and they brought carts, ladders, and equipment. The carts were three and a half metres long for the stone. He made a ramp in order that the animals and workmen could climb. They brought water and stone from below. He built the church with a lot of wood, fashioned into a good shape. It is very good and takes your heart. He finished the building in two years and built it after he had been king for one year. He collected all the necessary furnishings for the church, and gave them to the monastery. He gave twelve gold crosses, and gospels in gold and silver, and the story of Paul, and everything else that is necessary for a church. When Gabra Maskal built churches he started with Debra Damo; it was the second church in Ethiopia after Axum. He gave all his property and riches to Debra Damo. He asked Abuna Aragawi to become priest, and he agreed and became priest, and they brought angels for him; and the Holy Ghost came over the communion, and over all of them. The Abuna and Gabra Maskal took communion, and also the others; and God spoke with Abuna Aragawi and said that all who took communion that day would be assured of a place in heaven. When he left the church, Gabra Maskal collected all the poor people and also the big people of his government, and made a big feast at Debra Damo, giving food to the hungry and clothes to the naked, for the good of the church. Abuna Aragawi said he

would protect Gabra Maskal from danger, and follow him when he died; and Gabra Maskal bowed to the Abuna, and said, 'Bless me', and then 'Accompany me', and when he left, he asked whether he should leave the ramp up the cliff, and Abuna Aragawi said, 'Dāḥmemō' which means 'Take it off', and he asked Gabra Maskal to provide something like a serpent to climb with, because it was good that people should feel afraid when they saw the cliff, and pray for God's help; so the ramp was taken away, and a rope made with leather thongs in the form of a serpent as it still exists today. Afterwards the place was called 'Debra Damo', from the words of Abuna Aragawi (Dāḥmemō). Before this it had been known as 'Debra Halleluyah' as it is still sometimes called today, for when Abuna Aragawi had first gone up on the top, he had cried 'Halleluyah' to the north, east, south, and west.

3. *Other legends related by the Monks.*

Abba Haile Mariam, a monk, told me that a pagan queen Gudite,[1] who was burning many churches in Ethiopia, captured Debra Damo and used it as a stronghold for twenty years. At this time, the mountain had been used by the emperors as a prison where they kept their relatives in captivity to avoid rival claimants to the throne; and at the same time it was a monastery.

When the queen came some of the monks were killed, and some went away. The queen made a ramp up the cliff, three and a half metres wide, at right angles to the cliff near the present position of the rope, so that animals could go up, and horses and mules were stabled in the church; I was shown where the threshold of the southernmost of the two western doors had been repaired, after being damaged by the hooves of the animals. During this period the settlement became an ordinary town, with women living there.

The mountain was eventually retaken from the pagans by a king who brought ladders and scaled the cliff in the night. He brought monks, and re-established the monastery.

(See page 52, Part II, History of the Monastery.)

4. *King List.* Read to me by Abba Haile Mariam, out of the *Tarika nagast* (History of Kings), which contains lists of kings, 'from the time of Adam', the later historical matter becoming irrelevant and parochial.

King Bazen was in Ethiopia when Christ was born. King Sayfa-Ar'ed was the father of Abraha and Asbeha, a peaceful period. At this time Abuna Salama brought Christianity to Ethiopia from Alexandria. Before this the Ethiopians were worshipping animals (dragons).[2] After this, all became Christian. In the year 340 the church in Axum was built. In the time of King Seladoba, the Nine Saints came and made Christianity strong in Ethiopia. Seladoba is father of Ellameda, who is father of Tazina, who is father of Kaleb. In the time of Kaleb, everyone was a *shifta*.[3] He had

[1] In the late tenth century news came to Egypt of a pagan queen who was ravaging Christian country, massacring priests, and burning churches. According to Abyssinian tradition she captured Debra Damo, then the mountain of the princes.

[2] The ceiling panel *a*8 (fig. 19) contains the figure of a dragon swallowing an animal or fish. Panels *a*10 and *b*9 illustrate winged griffins.

[3] *Shifta* in Ethiopia are brigands or outlaws who are against the government. Kaleb was the celebrated invader of Arabia.

a cave in Axum, and an underground passage to Senafé. Kaleb is the father of Gabra Maskal, who built Debra Damo. At this time there was a priest Yared who composed songs and books for the church. There follows a list of kings who are said to be related, father to son:

Gabra Maskal — Constantinos — Wasan-Sagad — Fre-Sanai — Ander'az — Akala-Wedem — Germa-Asfar — Zergaz — Degna-Mika'el — Bahr-Ekela — Gum — Asgwagwem — Latem — Talatam — Oda-Gwash — Aizor (Aizor was only king for half a day because they killed him)—Dedem—Wededem—Asfare—Armah—Degna-Jen—Anbasa-Wedem—Del-Na'ad.

The dynasty now changes, and the throne is not given to the son, but to others who are not from Israel, the Zagwé Dynasty of Lalibela, which is said to have ruled for 330 years:

Zagwé[1]—Del-Na'ad (different from the one above)—Bahrwodin—Agb'a-Seyon—Senfa-Ar'ed—Nagash-Zore—Asfeha—Ya'qob—Bahr-Asgad—Admas-Sagad.

A new dynasty begins:[2]

Yekuno-Amlak, who took the crown in the time of Abuna Takla Haymanot, and ruled for 40 years, Wedema-Ar'ed (ruled 15 years)—Qedema-Asgad—Hezba-Asgad—Senfa-Ar'ed (the three ruled for 4 years)—Bahara-Asgad (5)—Yagba-Asgad (9)—Amda-Seyon (30)—Sayfa-Ar'ed (28)—Germa Asfare (10)—Dawit (33)—Tewodros (1)—Yeshaq (15)—Endreyas (7)—Hezba-Nan—Amda Iyasus—Badel-Nan (all for 5)—Zar'a Ya'qob (34)—at this time everyone was quarrelling about religion; a priest, Abba Giorghis, was preaching and writing many books.[3]—Ba'eda Mariam (10) brought a European who painted Christ, and the Ethiopians were against him. The painting is in Shoa or Gojjam at Atronsa-Mariam, which is also mentioned in the gospels.—Eskender (17)—Na'od (16), a good period—Amda Seyon (fought ten kings and killed all of them)[4]—Lebna Dengel (his remains are in the church at Debra Damo), he ordered his Minister of War, Digila Han, to fight Grañ.[5]

5. Gabre Ghiorghis, a monk, stated that the church was first built in the year 537 (Ethiopian Calendar); and that it had been renewed, but not since the time of Hatsay Lebna Dengel (1508–40), who repaired the south wall, and whose remains are in the church.

[1] Zagwé was the founder, perhaps, of the new dynasty, but does not occur as having ruled himself. The Debra Damo list omits the Zagwé kings, but instead gives the succession of the Solomonian house in exile during that period.

[2] The Solomonic dynasty is now restored. The order of names in the Debra Damo list differs from that in the lists published by Guidi and by Aklila-Berhan.

[3] Abba Giorghis (early fourteenth century A.D.) was the reputed founder of Gāsīčā Abba Giyorgis, an inaccessible place south of Amara Saint with three cave churches.

[4] The Debra Damo chronicler has possibly confused the two Amda-Seyons. The much earlier first one was the conqueror, and gave donations to Debra Damo; the second only reigned for less than a full year.

[5] The Debra Damo manuscript seems to raise few difficulties; if it ends with Lebna Dengel, presumably it belongs to his reign, or it is possibly an older manuscript in which the later kings have been inserted.

Prior to Yekuno-Amlak the details are very unreliable in our present state of knowledge.

King lists are imaginative before A.D. 330, and even up to A.D. 1280.

References on King-Lists

Guidi, *Storia della Letteratura Etiopica* (from 1270 onwards, only).

Aklila-Berhan Walda Qirqos, *Masheta amin* (Addis Ababa, 1954), This list starts at 2545 B.C.

Other monks said that the church was built in the year 370; and the plinth of the church (which is Axumite in design) had been built by Hatsay Gabra Maskal (sixth century), and that Hatsay Lebna Dengel built the upper part.

THE AGE OF THE LARGE CHURCH, ARGUED ON A COMPARATIVE BASIS

We find in both churches in the monastery of Debra Damo numerous wood carvings. Read in conjunction with other known facts, viz. the type of construction and architectural style, the evidence of manuscripts, and pottery, coins, and cloths found in the monastery, it is possible to indicate a tentative date for the building.

Axumite origins. In my opinion the fabric of the church consists of a basic structure, of Axumite origin and probably pre-Christian. It could have been converted into a church with the coming of Christianity and the establishment of the monastery. Some of the earliest churches were the immediate successors of pagan temples, and were built on the same sites, because the place already had religious associations, suitable building material lay ready to hand, and the erection of a new church purged the site of its paganism.

The decoration of the pre-Christian storied obelisks of Axum was copied from a timber and stone technique of building identical with the structure at Debra Damo. This method of construction appears to have been used earlier than, and during, the early years of the Christian era in Ethiopia. Through the employment of an Abyssinian, Bāqūm, the Ka'ba, the sanctuary at Mekka, was constructed in A.D. 608 with alternate courses of timber and stone.[1] The connexions of the Axumites with Southern Arabia are known, and D. H. Müller illustrates in *Sudar Altert* a South Arabian stone altar showing alternate recession and projection of walls as at Axum and Debra Damo.[2] The Abyssinian style with alternate courses of timber and stone occurred in the church at San'ā, built by Abraha. It was famous in the early days of Islam and glass mosaics and columns were taken to adorn the Ka'ba in A.D. 684.[3]

A few fragments of capitals (fig. 10) are lying near the church, and are possibly the remains of an earlier building. There are two different kinds of column supporting the carved ceiling (figs. 8 and 9); furthermore the six monolithic columns inside the church are not all identical in shape, and some have geometrical and meander patterns on the capitals. Such decoration looks as if it had been made at a time when the older columns were built into the new structure, or later, and the patterns are similar to those in the frieze which they support (pl. VI, *c*). Not all faces of the capitals are carved, and the incompleteness of the decoration on the capitals makes it seem likely that it was an afterthought, done when older columns were reused, or when embellishments were made to the early structure at a later date.

Eastern Influences

Christianity has been considered almost as an exclusive heritage of the West. The conquests of the early Church beyond the eastern frontiers of the Roman Empire have

[1] K. A. C. Creswell, 'The Ka'ba in A.D. 608', *Archaeologia*, xciv, 1951, pp. 97–102.

[2] C. Conti Rossini, *Storia d'Etiopia*, pl. xvii, n. 59; S. Pankhurst, *Ethiopia, a Cultural History*, London, 1955.

[3] K. A. C. Creswell, *op. cit.*

been forgotten, and few people have looked beyond the confines of the Roman-Hellenistic world for the origin of the characteristic art and architecture which the new religion had brought into being.

Joseph Strzygowski (*Orient oder Rom?*, 1901) urged scholars searching for the origins of church art to withdraw their attention from Rome and Hellenism, and turn towards a new horizon in the east, and in particular to Iran and Armenia. This view has been challenged by Professor Emerson Swift's strongly partisan *Roman Sources of Christian Art* published in 1951, and the majority of Italian scholars still support the position originally taken up by Rivoira in opposition to Strzygowski. The importance of the Italian contribution during the last twenty years was stressed by Ward Perkins in his paper *The Italian element in late and early Medieval Architecture*, 1941, although he fully admits that it has suffered from a somewhat partisan presentation.

Christianity seems to have come to Ethiopia in the first instance from Syria. Frumentius was on the ship of a 'philosopher of Tyre'; it is true that he went to Alexandria and was consecrated there by Athanasius, instead of going on, as he might have done, to Tyre and Antioch and perhaps Byzantium. This had the result of putting the Ethiopian church under Egypt eventually; but the 'Nine Saints' were almost certainly Syrian monks, and when they had the Bible translated into Ge'ez, it was from the version of Antioch, not that of Alexandria. The fact that the Copts had to forge a spurious canon of the Council of Nicaea in order to bring the Ethiopians under their jurisdiction suggests that some other influence, i.e. Syrian, opposed them. The second bishop is said to have come from Egypt.

Byzantium seems to be the main source of the Ethiopian Christian styles. Even the Persians may well have been so influenced; at the time of the Arabian conquests they had to continue the use of Byzantine coinage, and may equally have found it politic to preserve a Byzantine influence generally. A common Byzantine source would be the only reasonable explanation for the diversity of similarities. There may have been borrowing of ideas in more than one direction, and Ethiopia would not necessarily have to have received all her influences from Byzantium direct. It would be a long and almost impossible task to disentangle all the threads.

However, there can be little doubt about the Eastern origins of Ethiopian art. It has already been pointed out above (see p. 12, n. 1, and p. 13, n. 1) that the diagonal system of roofing and the use of bracket capitals are both Indian. Indian coins have been found at Debra Damo. It is likely that there was an interchange of cultural ideas in several directions; Indian buildings show Greek and Byzantine influence, and the Ethiopian rock-hewn and built-up churches could easily have been influenced from both directions.

Plans

Even though Christianity was persecuted in the west, it was the Hellenistic-Roman basilica which first emerged as a standard type of church. A common form in the east was the three-aisled basilica, composed of an oblong hall, divided lengthways by two rows of columns, with an apsidal sanctuary at the east end and on each side of this

a small room for the use of the clergy. At the west end was the narthex or ante-room, communicating with the nave which would be lit with clerestory windows over the aisles. The parallels with ancient Ethiopian churches are obvious, and Debra Damo is similar, as are the churches of the Nile Valley (Somers Clarke, *Christian Antiquities in the Nile Valley*, Oxford, 1912). There seems to be no proof that art styles reached Ethiopia via Nubia. It is likely that there were connexions between the early churches of Ethiopia and Nubia from the sixth century onwards, but there are few records except that about 975 there was correspondence between George, King of Nubia and Ethiopian Emperor.

Decorative Motifs

Just as buildings and sites for churches were often taken over from pagan predecessors, so were pagan motifs given a twist and a new significance, suiting them to Christianity.

The peacock, the bird of immortality, found its way into the repertoire of Christian iconography. Peacocks are frequently represented facing one another, with between them a vase filled with foliage shaped in the form of a cross. Trailing vines and grape clusters are other motifs. Animals also appear; the pagan 'paradeisos', an ancient version of a zoological garden, derived from the myth of Orpheus and the beasts, came to be used in Christian times, it being easy to substitute Christ for Orpheus. Formal treatments of these subjects illustrate the breakdown of the Hellenistic tradition and the encroachment of the east.

The sumptuous carved ceiling at Debra Damo contains animal subjects and could date from the seventh century or earlier. Combinations of Hellenistic and Oriental influence, of fighting animals and affronted birds are frequent in Persian Sassanide art of the fourth and fifth century (Diehl, *Manuel d'art byzantin*). Heraldic and confronted animals or animals in procession are an inheritance of Mesopotamian art which passed into the Byzantine culture area, first in the Sassanian period, and then by a second wave in the time of the Mohammedan domination from about the tenth century (O. M. Dalton, *Byzantine Art and Archaeology*, Oxford, 1911). The ceiling panels might have been reassembled in their present form at a date later than the seventh century, as there are also in the ceiling a few panels which seem later, decorated with geometrical and meander patterns, more in character with the frieze decoration in the church.

It appears likely that once there were more ceiling panels than at present exist. There are now only three groups, and a large portion of the ceiling over the vestibule contains no carved panels at present.

Furthermore, it seems that a reconstruction of an earlier ceiling took place, for one can observe on one side of group 'b' that it was larger, and there are the remains here of a possible extra four panels. Groups 'a' and 'b' have twelve each, and 'c' has fifteen. It is likely that the entire ceiling was once covered with carved panels, of which the greater part has disappeared.

It is not known whether such a rebuilding took place at a time when a pre-Christian building was being converted into a church, or later, perhaps in the fourteenth century

when King Amda-Syon I gave donations, or after an occasion of destruction, as occurred when Debra Damo was ravaged in the sixteenth century by the Turkish Pasha Uzdamer; but it seems more likely that the reconstruction occurred not later than the tenth century, for the majority of the frieze panels have decoration that could be of this date (see the Table of Similarities).

It is a coincidence that the animal subjects in the Debra Damo panels are remarkably similar to Indian prehistoric engraved stamp-seals of the Harappa culture from Mohenjodaro in the Indus Valley (second millennium B.C.), depicting animals in profile, with heads turned back, or being attacked, or arranged symmetrically in front of a tree (Stuart Piggott, *Prehistoric India*, Pelican Books, 1950).

The Harappa culture counted among its achievements a representational art which concerned itself largely with animals and natural forms, and these representations of contemporary wild and domesticated animals are amplified by the actual remains of animal bones discovered in the course of the excavations. Stamp seals of the Jhukar culture (second millennium B.C.) also represent animals, and cross motifs, and inter-weaving basket-work patterns like those on Coptic textiles (*ibid.*).

With ancient Egypt and Babylonia the Harappa civilization takes its place as the third area where urban civilization was born in the Old World. Probably its beginnings stemmed from the region to the north-west, some time in the fourth millennium B.C., but its development was entirely independent, and even at its height the Harappa kingdom had only sporadic and small-scale trading connexions with Sumer, and none at all with the Egyptian Empire (S. Piggott, 'A Forgotten Empire of Antiquity', *Scientific American*, November 1953).

The very qualities that enabled the Harappa civilization to endure unchanged for a thousand years apparently were responsible for its quick collapse, for it could not stand the upheaval of an invasion of tribes, probably Indo-European. A dark age of comparative barbarism ensued, but the Harappa civilization was not completely extinguished, and from the new mixture of peoples and ideas came the traditions which moulded historic Hinduism (*ibid.*).

May we assume that it could have had an influence on the Sabaean and Axumite kingdoms? The link is complete with Christian Ethiopia, for it is likely that there were trade routes between southern Arabia and the Indus Valley in these times. It has been noted (Part II) that Indian coins of the first to third centuries A.D. have been found in Debra Damo.

It is possible that in the Indus Valley can be found some origins of early Christian iconography, and we have now to discover whether the naturalistic art in Debra Damo, and also the carved panels from the church in Asmara, are a separate growth originating from the Indus Valley, through Southern Arabia in the early years of the pre-Christian Axumite kingdom, or whether they came to Ethiopia later, via Persia and Syria. The Indian contribution, if any, to Ethiopian art has yet to be considered.[1]

Piggott (*Prehistoric India*, *op. cit.*) suggests the fact that the Harappa culture is characterized by stamp seals and not cylinder seals and this should indicate that its eventual antecedents are likely to be found in Persia. He also states that the

[1] Sir Mortimer Wheeler, *The Indus Civilization*, Cambridge, 1954.

Harappa sites have produced some remarkable pieces of sculpture in the round, and the unexpected naturalism of some of these has caused doubts to be thrown on their authenticity as third-millennium work. The best-known piece of sculpture is astonishingly similar to some work of Kushan date.

FIG. 23. Wood carving, Egypt, tenth century. Bird alighting on the back of an animal.

FIG. 24. Wood carving, Egypt, tenth century. Animal with its head turned back.

(Museum of Islamic Art, Cairo.)

Is it possible, therefore, that the motifs on the animal panels in Debra Damo originate in India, and represent a phase of naturalistic art developed during the pre-Christian period in the kingdom of Axum? Indian influences in Debra Damo include the finding in 1940 of a number of gold coins of the dynasty of the Great Kushans (first to third century A.D.) (Part II, p. 51, n. 1). That the ceiling has been rebuilt in its present form we can be sure, and at such a rebuilding (perhaps between the eighth and tenth centuries) the geometrical panels could have been incorporated, at the same time as the frieze in nave and sanctuary and the chancel arch and west windows were constructed. As the frieze construction is typically Axumite it is likely that the church design reached its present form probably at an early date, and not later than the tenth century.

There is an important example in the Coptic Museum, Cairo, similar to the ceiling panels, of an iconostasis of sycamore wood from the church of St. Barbara, Cairo (eleventh century), described in Monneret de Villard, *The Church of Sitt Burbâra in Old Cairo* (Florence, Istituto di Edizioni Artistiche, Fratelli Alinari, 1922), and in E. Pauty, *Bois sculptés d'églises coptes* (*Époque fatimide*), (Publication du Musée arabe du Caire), Le Caire, 1920. It contains a number of panels carved with hunting scenes, fabulous animals, and birds. On one of the panels two crosses are seen. There is obvious Persian influence and the screen is regarded as the most beautiful Coptic monument of the Fatimid period (end of ninth to eleventh century). There are similar representations of animals, hunting scenes, and birds on fragments of carved

wood panels from the Royal Palace of the Fatimids (tenth to eleventh century) in the Museum of Islamic Art, Cairo, in which two panels are dated tenth century and show a bird lighting on the back of an animal (fig. 23) and an animal with its head turned back (fig. 24). Dalton (*Byzantine Art and Archaeology*, Oxford, 1911) illustrates a carved wooden chest (*c.* A.D. 600) from Egypt showing an animal with its head turned back, attacked by a lion, a subject greatly favoured in the most ancient oriental iconography. These examples may originate from a common source with the Debra Damo ceiling panels, and all are similar.

Whereas the animal subjects occur exclusively in the carved ceiling, the geometrical and meander patterns are used also in the frieze in nave and sanctuary, on the chancel arch, and the windows in the entrance hall at the west end. Meander patterns also occur in the Lower Church on beam ends framing a door opening in the wall to the inner sanctuary (fig. 15).

Such patterns are found in Christian buildings from the fourth to the sixteenth centuries and even later. This geometrical work could have been carried out in the period preceding the end of the tenth century (figs. 25 *a–e* and 26), although similar examples occur elsewhere also of the twelfth and fifteenth centuries (figs. 25 *f* and 27 *c*). In the church of the Holy Virgin of Dair as-Suryan in the Wadi 'n-Natrun, Egypt, are sanctuary doors with panels in ebony richly inlaid with ivory, some of which contain geometrical cross patterns, and are identical with those on the church and some frieze panels in Debra Damo. A Syriac inscription states that those doors were erected in A.D. 926 (*A Guide to the Monasteries of the Wadi 'n-Natrun*—O. H. E. Burmester, Ph.D. Cantab.).[1] Syrian influences in Ethiopia are known, and could have come via Egypt or been brought by pilgrims from Jerusalem. It is likely that there were connexions between the early churches of Ethiopia and Nubia from the sixth century onwards as mentioned above. There are other links with Egypt in the Coptic textiles in Debra Damo, of Egyptian origin (see Part II, p. 58).

Regarding the geometrical patterns in which combinations of swastikas form crosses, and the combinations of squares, we find in the Coptic Museum, Cairo, examples in stone (fifth to sixth century) (figs. 25 *a* and *b*), and in wood, in the Museum of Islamic Art, from eighth to ninth centuries (figs. 25 *c*, *d*, and *e*). The Coptic Museum also contains a wooden door of panels of ebony with borders inlaid with ivory from the church of El Moallaqa (thirteenth century) (fig. 25 *f*), and a door panel of twelfth to thirteenth century (fig. 27 *a*). The former is a late example of this type of pattern, being inlaid. It is identical in pattern with the decoration on the chancel arch at Debra Damo (pl. V), as is the tenth-century example described above from the monastery in Wadi 'n-Natrun. The pattern also occurs in the two windows in the entrance hall at Debra Damo (pl. VI *b*; fig. 11), the latter being very similar to the decoration on some of the frieze panels in the church. Another late example in the Coptic Museum is of a square wooden panel filled with a cross with lozenges in the corners, of the thirteenth to fourteenth century (fig. 27 *b*). This motif is very similar

[1] This church, in the beginning a Coptic foundation, was purchased about the beginning of the eighth century by merchants of Tekrit (Mesopotamia) who had a colony in Egypt, for the use of monks of their nation. The monastery was sacked and in A.D. 817 restored and rebuilt by the Syrians.

to others at Debra Damo, including frieze panel F 47 (fig. 18) and ceiling panel b 11 (fig. 19). Although we find many late examples of this type of geometric pattern in wood, early examples also occur, as described above (figs. 25 *a–e*).

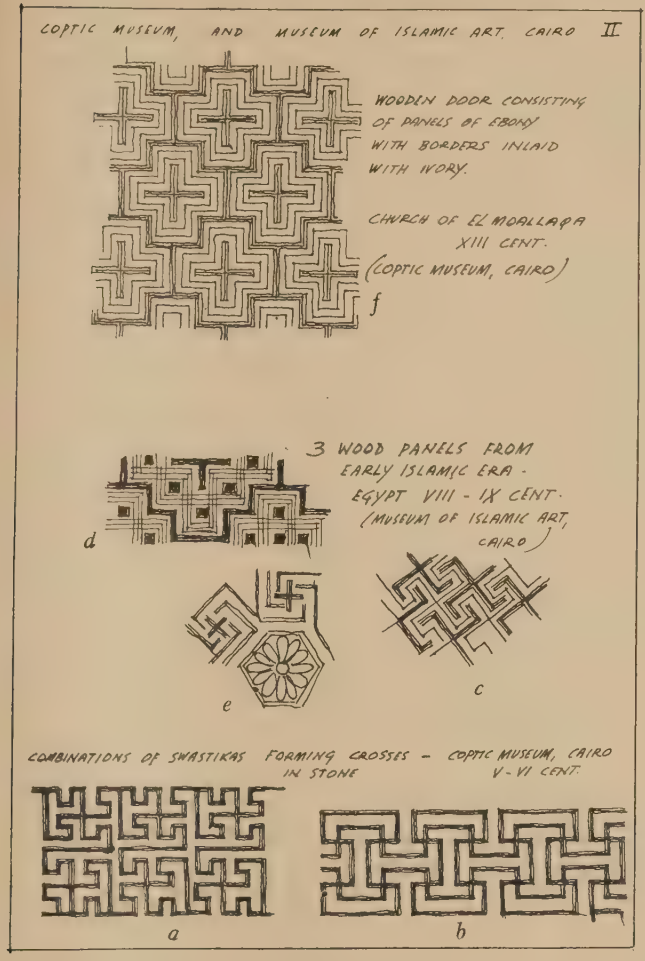


Fig. 25.

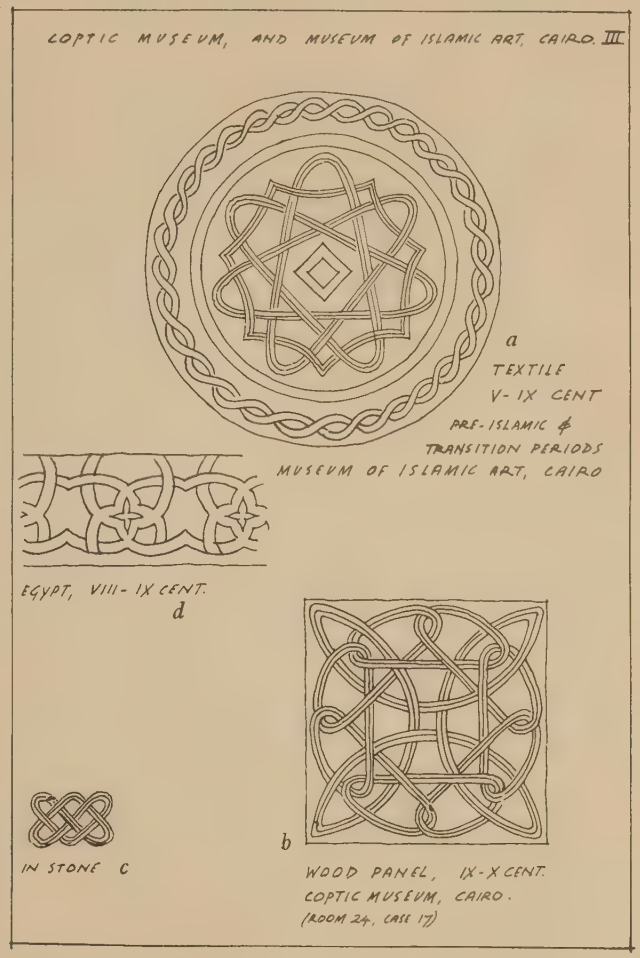


Fig. 26.

Comparative ornament in the Coptic Museum and the Museum of Islamic Art, Cairo.

The third type of decoration at Debra Damo, that of meander patterns of interlacing lines which frequently form crosses, occurs in an important Mameluke wood panel (fourteenth to fifteenth century) in the Museum of Islamic Art, Cairo (fig. 27*c*). At Debra Damo there are the frieze panels F4 and F7 (fig. 17 and fig. 15) which are remarkably similar. There is also the ninth- to tenth-century wood panel in the Coptic Museum, Cairo (fig. 26 *b*) which is similar to the Debra Damo frieze panels F41, F42, F43, F52 (fig. 18) and F6 (fig. 17). The Coptic textile of the fifth to ninth century (pre-Islamic and Transition period) in the Museum of Islamic Art (fig. 26 *a*) contains meander patterns of a similar character, as also does the fragment from Egypt of the eighth to ninth century (fig. 26 *d*) which is an example of a series of cross

motifs formed by interlacing lines. Basket-work patterns of interlacing lines are found in textiles of the fifth to ninth century (fig. 26 *a*) and in stone (fig. 26 *c*). They also occur in fourth-century frescoes, as well as in the Pharaonic period.

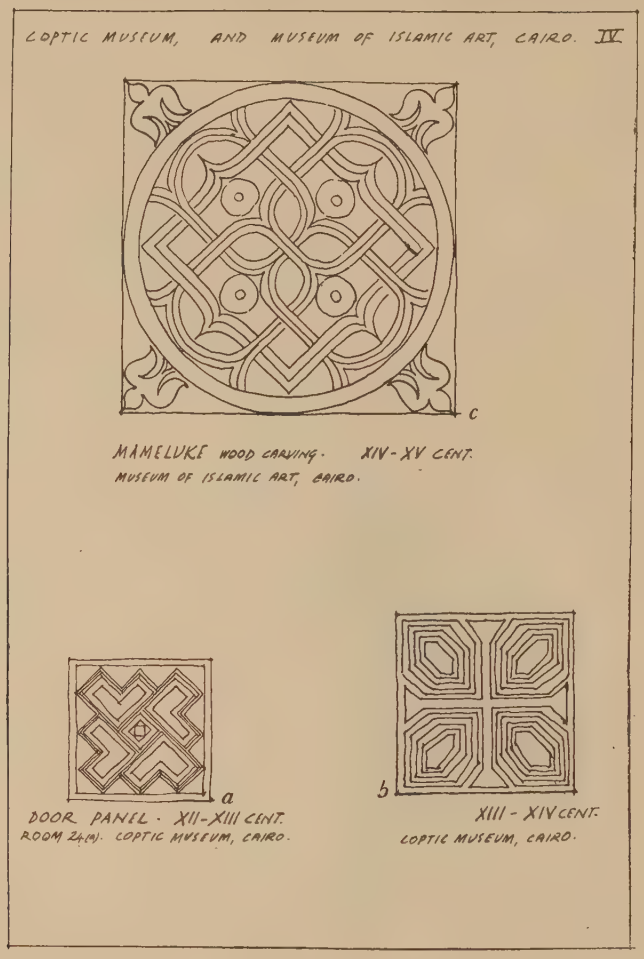


FIG. 27. Comparative ornament in the Coptic Museum and the Museum of Islamic Art, Cairo.

The long period over which these patterns have been used illustrates the continuity of the subject matter and the difficulty of exact dating.

Professor Mordini describes (Part II) textiles[1] and coins found at Debra Damo and from these eighth- to tenth-century coins, the pottery and fragments of cloth of the period seventh to twelfth century, one may assume it was already considered a place of particular sanctity at the end of the ninth century, and that its present church must have had its origin in a building of Christian cult of those times, probably superimposed upon a preceding construction of pre-Christian origin as suggested above.

[1] A. Mordini, 'Un tissu musulman du moyen âge du convent de Dabra Dammò', *Annales d'Ethiopie*, vol. 2, Addis Ababa, 1958; 'Tre tíraz abbasidi provenienti dal convento di Dabra Dammò', *Boll. dell' Istituto di Studi Etiopici*, vol. 2, Asmara, 1958.

It appears from the coins found in the monastery that it must have had an important position in the first contacts between Christian Ethiopia and the Moslem Communities of the south, which, in the light of recent Italian researches, was already in flower in the eleventh century (Monneret de Villard, v, 'Note sulle influenze asiatiche nell'Africa Orientale', *Rivista degli Studi Orientali*, xvii (Roma, 1938), pp. 303–49).

We can expect that the panels with animal subjects in the carved ceiling may date from the eighth century or even earlier. The hand of more than one artist is apparent, and the panels could have been reassembled later together with the few alien (geometrical and meander) patterns into their present form, and perhaps this reassembly took place between the tenth and fourteenth centuries.

The geometrical and meander patterns in the rest of the church could easily be of the period preceding the end of the tenth century, although these are also similar examples elsewhere as late as the twelfth to fifteenth centuries. The latter period is possible but unlikely, unless a second rebuilding of the church took place at that time.

It is tempting to think that a big rebuilding might have occurred at Debra Damo in the fourteenth century when the monastery underwent a revival, following the receipt of donations from King Amda-Syon I, whose royal name was Gabra Maskal. We know from manuscripts[1] that during the thirteenth, fourteenth, and fifteenth centuries Debra Damo found itself in a noteworthy position of prestige and wealth (see Part II, 'History of the Monastery'). There is no evidence that any rebuilding occurred after the possible damage by Uzdamer (sixteenth century).

We also have the problem of the addition at the west end. Was this added perhaps at the same time as a possible extension to the room on the north-east corner? In view of the fact that these portions are identical in style and construction with the main body of the church, one is inclined to believe that they date from a very early period. The diagonally constructed timber ceiling over part of the front porch is a method copied in stone in the rock-hewn church of Sokota. This church, of Maskala Kristos, has a 'stepped plinth' which is a link with pre-Christian Axumite buildings (Buxton, 'Ethiopian Rock-hewn Churches', *Antiquity*, xx) as well as the above-mentioned rock-hewn ceiling.

The only other clues for dating, the paintings on the dome ribs and panels, are unreliable, for it is customary for paintings in Ethiopian churches to be renewed when worn. The pattern on the ribs is similar to ninth-century examples in stone at Ravenna, as well as the eighth and ninth-century examples in the Museum of Islamic Art in Cairo (fig. 26 *d*). The style of the script on the panels is not likely to precede the year 1500; the long noses in the portraits are characteristic of an early period of Ethiopian painting (fig. 6). The monks say the paintings are not more than 200 years old.

The large church of Debra Damo is certainly the prototype whose details were copied in the numerous built-up and rock-hewn churches elsewhere in Ethiopia. It is the stylistic link between the earliest and the later Ethiopian buildings.

[1] C. Conti Rossini, 'Pergamene di Dabra Dammò', *Rivista degli Studi Orientali*, xix, Rome, 1940.

APPENDIX A

FRIEZE PANELS: CLASSIFICATION, DESCRIPTION, AND PARALLELS

THERE are 36 panels in the nave, 24 in the sanctuary, and 2 loose ones in the room adjoining the sanctuary. There are 15 main types of motif carved in the frieze.

The panels have been numbered for purposes of this description consecutively from the north-west corner of the nave, in a clockwise direction.

Type (A): nos. 35, 56. Interlocking squares forming crosses, either placed square with the panel or diagonally. (Type A is similar to fifth- to sixth-century patterns in Cairo, fig. 25 *b*.)

Type (B): nos. 1, 9, 15, 16, 20, 29, 33. Combination of swastikas, in between which crosses are formed. Compare the infilling panels in the windows facing west in the inner wall of the entrance porch (the former west front), see fig. 11. (Type B is similar to fifth- to sixth-century patterns in Cairo, fig. 25 *a*.)

Type (C): nos. 13, 23, 34, 38, 55, 60. Combinations of crosses, sometimes placed diagonally, in which squares are sometimes formed in the spaces between the crosses. One of these panels, no. 60, is loose and is in the room next to the sanctuary. (Type C is similar to eighth- to ninth-century patterns in Cairo, figs. 25 *c* and *d*.)

Type (D): nos. 24, 48. Interlacing geometrical ornament, forming cross patterns.

Type (E): which can be divided further into four sub-types all of interlocking geometrical ornament which forms cross patterns. (Type E is similar to eighth- to ninth-century patterns in Cairo, fig. 25 *d*.)

Type (E i): nos. 30, 54. With central cross, placed square or diagonally.

Type (E ii): nos. 2, 5, 32. Similar, but without a central cross.

Type (E iii): nos. 18, 28, 37, 46. Interlacing patterns work out diagonally from the centre and form crosses at the sides. The direction of pattern is similar to that in Type (G).

Type (E iv): no. 34 (also in Type (C)). Appears to be part of a larger panel, with motifs similar to those in Type (J).

Type (F): nos. 21, 22, 31, 59. A central cross or square with zigzag patterns completing the rectangle. In panel no. 59 the zigzags are not rectangular as in the others. It suggests the decoration found in Type (H), and also in the carving on the chancel arch (pl. v). (Type F is similar to eighth- to ninth-century patterns in Cairo, fig. 25 *d*.)

Type (G): nos. 26, 44, 50. Symmetrically arranged rectangular zigzag ornament, tending to form crosses at the sides. Type (E iii) is similar, but in that case the movement interlaces. This ornament is similar to that on the chancel arch. Panels nos. *c*2 and *a*3 in the ceiling are also similar. (Type G is similar to eighth- to ninth-century patterns in Cairo, fig. 25 *d*.)

Type (H): nos. 8, 17, 36, 45, 58. Zigzag patterns in various degrees of irregularity, they come naturally as a result of infilling around central motifs such as in the chancel arch and in ceiling panels nos. *a*3 and *c*2.

Type (I): nos. 39, 53, 61. Simple crosses outlined with incised lines. No. 61 is a loose panel lying in the room adjoining the sanctuary.

Type(J): nos. 27, 49. Series of squares staggered in successive rows. The square motif is also used in Type (C) in combination with crosses. Compare ceiling panel no. *c*4. (Type J is similar to eighth- to ninth-century patterns in Cairo, fig. 25 *d*.)

Type (K): nos. 10, 40, 57. Miscellaneous panels not conforming to the regular geometric patterns described above. No. 10 has in its successive channellings traces of colour in this order: black, white, red, black, in which the white is the ground.

Type (L): nos. 3, 4, 7, 14, 19, 41, 42, 52. Free meander patterns based on interlacing channellings suggestive of vegetable origins, and tending to form crosses. No. 14 is the most ornamented panel of all, the whole panel being carved, not only the centre. It is next to the chancel arch. No. 4 has a free treatment of the corners, and a red line inside the pattern. No. 7 has a red

line in the sunken centre of the main ribs and a red background. Ceiling panel *a*5 is similar, and also the four carvings (fig. 15) in the lower church. (Type L is similar to the ninth- to tenth-century panel in Cairo (fig. 26 *b*) and also the fourteenth- to fifteenth-century panel, fig. 27 *c*.)

Type (M): nos. 25, 51. Each contains a central cross with a pattern of outstretched wings developed around it.

Type (N): nos. 6, 11, 12, 43. The basis is a diagonally placed square with interlacing lobes suggesting a cross shape. In nos. 11 and 12 the square is absent, no. 11 having a coiled circular motif superimposed, and no. 12 four pairs of outstretched wings reminiscent of panels nos. 25 and 51. Compare with ceiling panel *b*11, and *b*4. The bracket under the chancel arch has a similar pattern. (Type N is similar to the ninth- to tenth-century wood panel in Cairo (fig. 26 *b*), and also to fifth- to ninth-century Coptic textile in Cairo (fig. 26 *a*).)

Type (O): no. 47. Is similar in feeling to those of Type (N), having a central cross and eye-like corner infillings. (Type O is similar to the thirteenth- to fourteenth-century panel in Cairo, fig. 27 *b*.)

APPENDIX B

CEILING PANELS: CLASSIFICATION, DESCRIPTION, AND PARALLELS

(pls. VII *d*, VIII, IX, X, XI, figs. 19, 20)

The sumptuous decoration comprising three groups of carved panels in the ceiling of the inner entrance hall of the large church is one of the glories of Debra Damo. The panels are decorated in bas-relief with animal scenes and geometrical ornament of great beauty, and show strong influences from Eastern artistic sources.[1]

The designs on the ceiling panels are either symmetrical or non-symmetrical. The subjects broadly divide themselves into six groups (fig. 19): (i) peaceful arrangements of animals, (ii) animals in front of trees or vegetation, (iii) animals biting each other, or being attacked, (iv) animals drinking from a cup, (v) four animals arranged symmetrically around a cross or interlocking, (vi) geometrical designs, possibly not belonging to the same period or workmanship as the animal subjects.

In the following description of the ceiling, each panel is given a reference letter, *a*, *b*, or *c*, referring to the main group in which it occurs, and a number, referring to the position of the panel within the group.

Subject (i): Peaceful arrangements of animals.

Symmetrical arrangement:

*c*3. Two antelopes running in opposite directions.

Non-symmetrical arrangement:

*c*1. Lion and lioness back to back.
*b*2. Antelope family, suckling young.
*b*3. Antelope family, suckling young.
*b*5. Antelope sucking hind hoof.
*a*2. Stag with hoof in mouth, its young, and bird.
*a*7. Rhinoceros, dog, and a tree.

[1] I was fortunate, when doing the restoration work, in getting good illumination for photographing the carved ceiling. When I had portions of the external walls demolished, I was able to get better photographic results than had any of the previous visitors studying the church.

Subject (ii): Animals in front of trees or near vegetation.

Symmetrical arrangement:

*a*9. Two antelopes face to face, on their hind legs, and a flower motif.
*b*10. Two antelopes back to back, browsing off a tree.

Non-symmetrical arrangement:

*a*1. Zebu, and a meandering tendril.
*a*4. Rampant lion, and palm tree, and head of another lion.
*a*10. Winged griffin and snake near trees.
*a*12. Camel in front of palm tree.
*b*9. Winged griffin and a palmetto.
*c*12. Elephant browsing off a tree.
*c*15. Buffalo in front of palm tree.
*d*8.[1] A walking elephant, and vegetation.

Subject (iii): Animals biting each other, or being attacked. One head is usually turned back.

Non-symmetrical arrangement:

*a*6. A goat looking back, and observing an animal being attacked by another.
*a*8. A dragon swallowing an animal or fish.
*b*1. An antelope attacked by a carnivore; its young, and vegetation.
*b*8. A wild ass being attacked by a carnivore.
*c*6. ? a snake biting a fish.
*c*9. A giraffe attacked by a leopard, with another animal and a tree.
*c*11. Equine antelope attacked by a carnivore.
*c*13. Gazelle attacked by a carnivore.
*c*14. A snake eating a small animal.

Subject (iv): animals drinking.

Symmetrical arrangement:

*b*6. Two antelopes drinking from a cup or flower.
*c*10. Three birds drinking.

Subject (v): Four animals arranged symmetrically around a cross, or interlocking.

Symmetrical arrangement:

*b*7. Four animals (oryx) mutually sucking.
*c*5. Four antelopes symmetrically arranged around a cross, with vegetable motifs.

Subject (vi): Geometrical designs.[2]

*a*3. Zigzags and a cross. Possibly part of a larger piece. Similar to the chancel arch carvings and some frieze panels.
*a*5. Meander pattern. (Compare frieze panels.)
*b*4. Interlacing circles.
*b*11. Formation of a cross.
*c*2. Zigzags and cross. (Compare *a*3.)

[1] Prof. A. Mordini, in 'Il soffitto del secondo vestibolo dell' Endā abuna Aragāwi in Dabra Dāmmò', *Rassegna di Studi Etiopici*, vi, fasc. i (Rome, 1947), illustrates panel *d*8. This panel, together with two others he also describes, is no longer in position. One of the panels described by Littmann, Krencker, and Lüpke (*op. cit.*), a lion and a lioness back to back, is no longer in the church.

[2] The panels in the ceiling decorated with geometrical designs are different from those ceiling panels having animal subjects. They have more similarities with the carvings on the frieze panels in nave and sanctuary. Some of these geometrical ceiling panels look as if they are part of a larger piece, cut to fit.

*c*4. Staggered rows of squares. (Compare frieze panel 49.)
*c*8. A cross and palm leaves.

N.B. Fig. 20 shows details of the construction of the ceiling. The main members have short cross members jointed into them. The underside of all the ribs is decorated with two grooves.

TABLE OF SIMILARITIES

(N.B. The majority of panels other than animal subjects in Debra Damo are similar to examples elsewhere of the eighth to tenth centuries)

Date of examples in Cairo museums	*Figure no. of examples in Cairo*	*No. of similar frieze panels in Debra Damo*	*No. of similar ceiling panels in Debra Damo*	*Other patterns at Debra Damo*
GEOMETRICAL TYPE:				
Fifth to sixth centuries	25 *a*, 25 *b*	1, 9, 15, 16, 20, 29, 33, 35, 56	—	
Eighth to ninth centuries	25 *c*, 25 *d*, 25 *e*	1, 2, 5, 8, 9, 13, 15, 16, 17, 18, 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 44, 45, 46, 49, 50, 54, 55, 56, 58, 59 60.	C2, A3, C4	The two west windows and the Chancel arch*
Thirteenth century	25 *f*	1, 9, 15, 16, 20, 29, 33, 35, 56.	—	
MEANDER TYPE:				
Ninth to tenth centuries	26 *b*	3, 4, 6, 11, 12, 14, 19, 41, 42, 43, 47, 52.	A5, B4, B11.	Bracket capital, and in the small church.
Fourteenth to fifteenth centuries	27 *c*	3, 4, 7, 14, 19, 41, 42, 52.	A5	

* The church of the Holy Virgin of Dair as-Suryân in the Wadi 'n-Natrun, Egypt, has sanctuary doors with panels in ebony richly inlaid with ivory, whose patterns are identical with those in the Cairo Museum (fig. 25 *d*) and also the chancel arch in Debra Damo. That church was rebuilt by Syrians in 817 and a Syriac inscription mentions the doors being erected in A.D. 926 (Burmester, *Guide to the Monasteries of the Wadi 'n-Natrun*).

PART II. THE LOWER CHURCH, THE GROTTOES IN THE BURIAL ZONE, AND THE HISTORY OF THE MONASTERY

By ANTONIO MORDINI, Esq.

THE LOWER CHURCH

ON the east side of the *amba* on which the monastery stands is a ledge, about 20 m. below the top; this was shown by Krencker to have been used as a cemetery (pl. XIII *a*).[1] Along the flanking walls are several grottoes and at the southern end is a small terrace, bounded on the outer edge by small retaining walls. Here stands a small church

[1] *Deutsche Aksum-Expedition*, Band II, *Ältere Denkmäler Nordabessiniens*, Abs. 341 (Berlin, 1913).

(pl. XII), which, like the large church above, is dedicated to Saint Abuna Za-Mika'el Aragawi, founder of the monastery. It is especially venerated, having been built over the cavity in which, according to the legend, the saint disappeared on the 14th of the Teqemt month.[1]

The plan is rectangular, standing east-west, with the main entrance facing west (fig. 28). The external walls are of no particular note, being in a modern style, of flat stones roughly cut and laid irregularly in mud mortar. They lack entirely the timbers or 'monkey-heads', which are the outstanding peculiarity of the large church, studied by Krencker, Buxton, and Matthews.[2]

At 2·25 m. above the ground, along the outside walls, runs a string-course of slates projecting about 40 cm.; a second similar string runs at a height of 80 cm. above this, at the level of the main roof; a third, similar again, encircles the turret that forms the cupola or raised portion over the centre of the building. The overall height of the church is 6·2 m. from the ground to the roof over the raised part. A characteristic external staircase, attached to the rocky cliff adjoining the side of the façade, gives access to the roof, which is formed of beaten mud, 20 cm. thick.

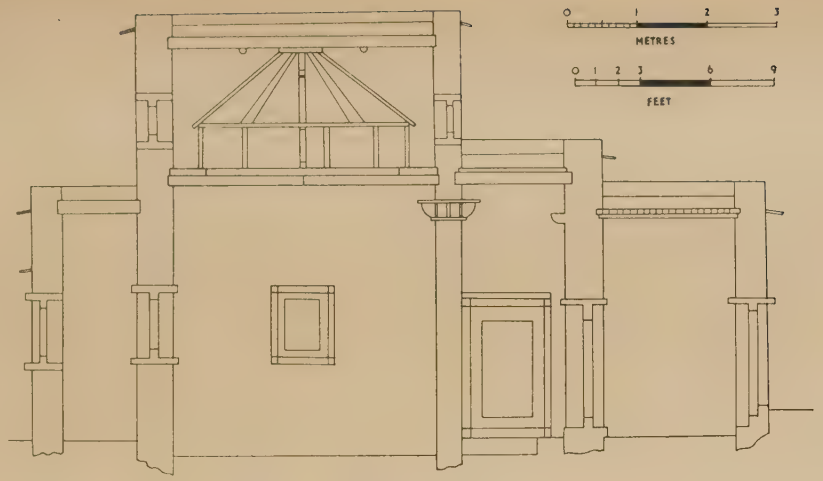
Three doors give access to the corridor that isolates the *maqdas* (sanctuary) from the rest of the church. This corridor runs all round the building. Three other doors, more or less corresponding to the foregoing and of similar dimensions, give access from the corridor to the interior of the sanctuary; these, in contrast to the external doors, contain simple geometrical decoration carved in the corners of the doors (see Part I; fig. 15). These rough designs have similarities with those on the carved frieze-panels in the nave and sanctuary of the large church.

The walls surrounding the sanctuary, on the inner side of the encircling corridor, and not visible from the outside, are very old and in the same style as those of the large church, of a timber ('monkey-head') and stone technique. In the sanctuary are two large columns, one of stone, the other of wood, which carry the west wall of the raised central portion. These columns have wooden cruciform capitals which seem to be derived from a stone prototype similar to the large capital on the ground outside the large church (see Part I, fig. 10).

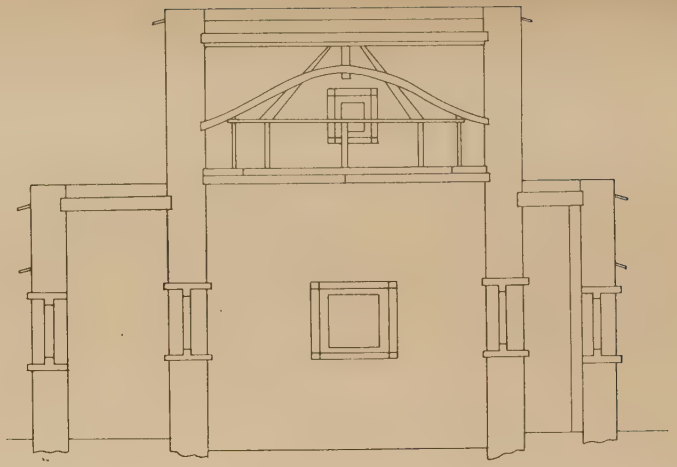
Inside the raised central portion is a timber framework forming a sort of dome as described by Krencker (*op. cit.*). Such a dome, as now in the sanctuary of the large church, was possibly lined with cloths to form a canopy over the *tabot*. The altar standing below is of simple rough timber-work, and certainly not ancient. To the right of the altar is an opening in the ground with sides 50 cm. long, covered with movable pieces of slate, and usually hidden by a carpet. This leads into the underground cave, where, according to the legend, Abuna Aragawi vanished. Mamher Takla-Ab-Tasfay, head of the monastery, affirmed that no one had entered the cave after Abuna Aragawi, except a certain Abba Sanemaryam whose cross fell into the cavity. The monks attribute miraculous powers to the dew that forms on the under-

[1] M. A. van den Oudenrijn, *La Vie de Saint Za Mika'el Aragawi*, Imprimerie St Paul (Fribourg, 1939); I. Guidi, *Il Gadla Aragawi*. Mem. R. Acc. Lincei (Roma, 1895).

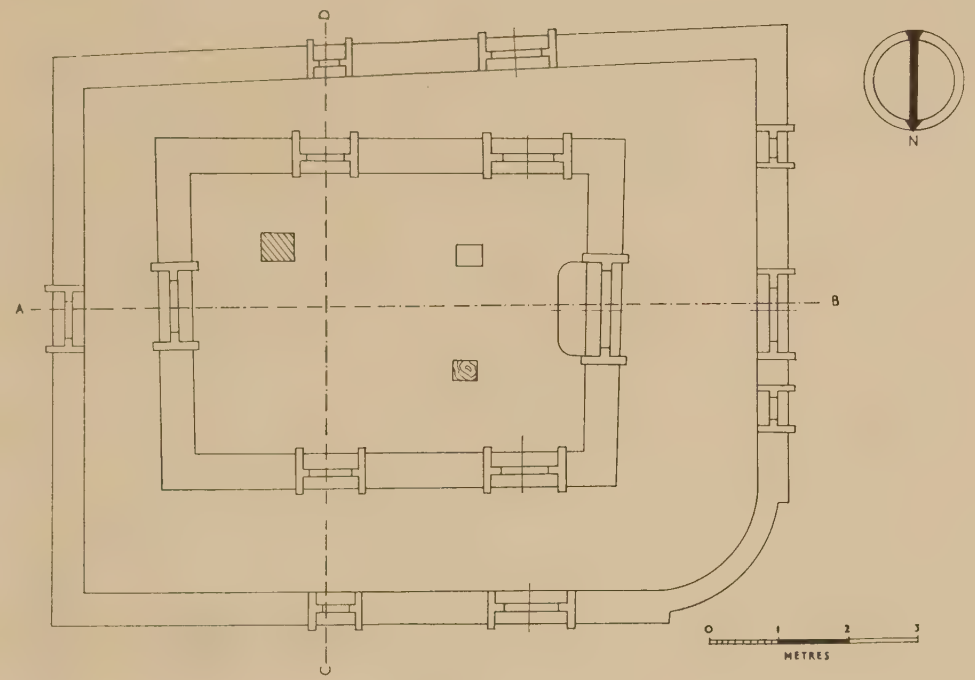
[2] *Deutsche Aksum-Expedition*, Band II, Abs. 344–7–8–9; D. R. Buxton, 'The Christian Antiquities of Northern Ethiopia', *Archaeologia*, xcii (Oxford, 1947); D. H. Matthews, 'The Restoration of the Monastery Church of Debra Damo, Ethiopia', *Antiquity*, xxiii, 1949.



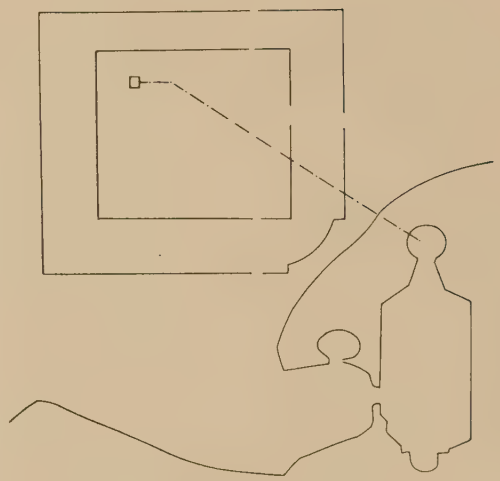
Section A–B.



Section C–D.



Plan of the Lower Church.



Plan showing relationship of the Lower Church with the Cave.

FIG. 28. Plans and sections of the Lower Church.

side of the slates from the humidity of the cave, and use it for healing, applying it to sores. We were able to examine the entrance to the crypt; a short descent, steeper than a proper stairway, leads to the floor of the cave, which is about 1·7 m. below the floor of the church. We could see vaguely some small murals, but it was impossible to define the subject. The cave appears to turn at first towards the west and then to bend sharply towards the north; but because of the watchfulness of the monks, we had to postpone our exploration of this, the most sacred and inviolable part of the whole monastery.

The lower church was evidently built in a relatively recent period, and later than the large church. It is probable that in very ancient times there was a place of worship here dedicated to the founder of the monastery, in shape probably different from the present one, and that it had, through age and fire, been destroyed and rebuilt anew after the architectural formula of the isolated sanctuary, of which numerous examples from the fifteenth century to today exist in Ethiopian architecture. This type, which until now has been thought to be of very recent origin, appears, in general lines, early in the fifteenth century. The church in the monastery of Gunde Gundié (Agamé), which stands in a remote locality towards the Danakil, where the hordes of Grañ did not penetrate, was built by members of the heretical sect of Stefanites in the fifteenth century. Such a church, which appears to have undergone only very slight modifications, has a central sanctuary surrounded by corridors. The vestibule is of exceptional dimensions, 5·5 by 12·7 m., and covered by a straw roof, supported by very tall columns, carved and painted. The rest of this building has a flat roof of mud.[1]

Even today churches are built following much the same formula. The open supports on the fourth side of the lofty sanctuary are replaced by a wall with a central doorway and the space beyond made into a vestibule, thus the adjacent walk of the corridor is rendered superfluous and eliminated. A good example of this last type, modified by the absence of a central external door, occurs in the existing church of St. Michael (Enda Mika'el) of Gheblen, a small inhabited centre situated about 20 km. east of Adigrat on the road leading to Gunde Gundié. Such a church, built about forty years ago, illustrates the architectural style of religious buildings in many places around Agamé and Enderta, vigorously resisting the barbarism of the progressive expansion of the circular type of church, a form which in recent years has been increasingly used in Eritrea and eastern Tigrai, areas formerly dominated by the rectangular church plan.

THE GROTTOES IN THE BURIAL ZONE

In the rocky walls beside the ledge on which stands the small church are caves of various sizes, which seem to have been dug by hand. Some of them have their entrances closed by walls consisting of stone set in mud mortar. They are undoubtedly of very ancient origin, and monks and others are still interred in them (pl. XIII).

A preliminary exploration of some of the open caves carried out quickly in October

[1] A. Mordini, 'Il Convento di Gunde Gundiè', *Rassegna di Studi Etiopici*, xii, pp. 30–70, fig. 1–19, 29–30, Roma, 1954.

1937 had unsatisfactory results; they only contained a few fragments, almost unrecognizable, of human bones. Nevertheless acoustical sounding convinced us that excavation might have revealed an underground crypt, totally ignored by the monks. But not wishing to hurt their feelings we thought better to postpone digging. Instead,

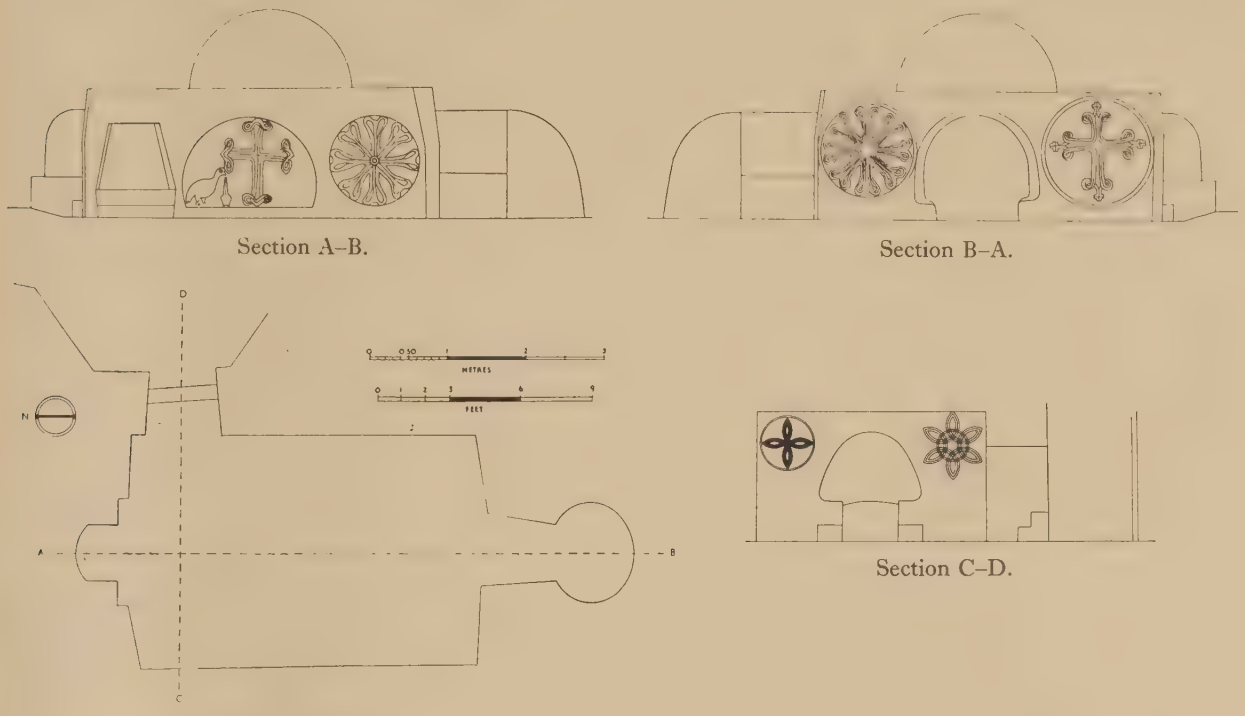


FIG. 29. Plan and sections of the Cave adjoining the Lower Church.

in June 1938, we carried out a new and more accurate survey of the caves. Our effort was soon rewarded. In examining one of the larger caves we discovered a notably artistic flat relief engraved on the walls, appearing to date from a remote period (pl. XIV).

This cave is nearly opposite the side entrance of the small church described above. It is excavated in the side of the rock wall, with a medium-sized entrance about 3 m. deep inside which can be seen on the lower left-hand side two small openings. The first opening leads to a small oval cavity, of which there is little to be said for we found it completely empty; but from the sound of the floor it is almost certain that a crypt exists underneath. The second opening, a small trapezoid, descends a short way to a larger and more interesting cave; it is 4·12 by 2·95 m., orientated north to south. This compartment, with a height of 1·65 m., has, in the centre of the ceiling, a dome 2·05 m. in diameter and 1 m. in depth where it is possible to stand upright (pl. XIV and fig. 29).

Opening from the south wall is a narrow corridor and a small niche 1·80 m. by 1·32 m. in height. It appears to have been separated from the principal room until

very recent times by a small wall of beaten earth, which has now almost completely disappeared. A characteristic niche of very small dimensions, which when seen from the front looks like a gigantic mushroom, exists in the middle of the north wall.

The particular interest of this large cave, apart from its singular form, lies in the numerous bas-reliefs on three of its walls (pl. XIV; fig. 29). On the north wall, right of the niche, is a geometrical six-pointed star 80 cm. in diameter; left of the niche is a four-pointed star within a circle 63 cm. in diameter. On the west wall are three large motifs: the southernmost is a circle containing a carved cross 1·2 m. in height. The second is similar in form to the niche in the end wall, and the engravings therein have been damaged and are difficult to interpret; they appear to have been a stylized representation of the Calvary, with a large central cross and two smaller ones at the sides. The third is a circle containing a large cross with eight arms, 1·2 m. in diameter. The south wall has no decoration. The east wall has two groups of reliefs: the first, near the door, describes rather more than a semicircle which contains a large cross, 1·13 m. high, with a bird to the left, perhaps a peacock, the beak resting on a peculiar object like a vase with a long narrow neck. The second relief is circular and contains a cross with eight arms, 1·19 cm. in diameter, similar to that on the east wall. A motif similar to that to the left of the niche in the north wall occurs in a small perforated stone window proably of the Axumite epoch.[1]

The monumentality of the decoration suggests that this cave must certainly have had considerable importance; further, the sacred character of the structure and its decoration seems to link it with the whole community rather than with the whim of an individual monk of the middle ages. Its very modest dimensions exclude it from being used as a building for worship in the epoch before the construction of the principal church of the monastery, but it could have had commemorative or funeral uses. We believe that before more detailed exploration, it is already possible to understand the significance of this singular monument from examination of local traditions, from the experience of those few Europeans who have been to Debra Damo, and from data collected during our own visits from 1939 to 1943.

It is to be observed that this cave is in that part of the *amba* used already in antiquity as a burial place, an area chosen for its particular holiness as a hermitage.

It is known that on the same ledge is a small cave; in it, the monks affirm even today, Takla Haymanot lived during his stay in the monastery in the thirteenth century. It does not differ in dimensions or structure from the other caves and was visited in 1906 by E. Littmann and the other members of the German Axum-Expedition.[2] More than seventy years before the traveller Samuel Gobat was shown a cave where, the monks said, the Abuna Za Mika'el Aragawi was still living; Gobat could not enter it for lack of light.[3]

[1] *Deutsche Aksum-Expedition*, Band III, *Profan und Kultbauten Nordabessiniens*, Abs. 73 (Berlin, 1913).

[2] *Ibid.* Band I, p. 22.

[3] Samuel Gobat, *Journal of a Three Years' Residence in Abyssinia* (London, 1834), pp. 316–17: 'By the side of one of these grottoes there is a cave in which all the monks affirm that the Abuna Aragawi is still living and that he makes himself visible from time to time to the more holy of them. I wished to enter it, but the monks, who said it was impossible to come out of it alive, would not have anyone enter with a candle, and for my own part, fearing that there might be some precipice in it, I would not enter it without a light.'

In *Gadla Aragawi*, of which there is a copy dated certainly before 1425, the narrative, evidently composed in the monastery, records the tradition, believed at that time, of a saint who founded the monastery. It describes how the good Za Mika'el arrived on the *amba* and chose for his habitation a cave[1] in which he lived and in which he received from God the agreement (*Kidan*) consecrating him on earth a saint.[2] He vanished in this cave on the 14th of the month of Teqemt at the age of 92 years.[3] In the same religious work we find also that at the time of the seventh superior, Yohanni, a chapel was consecrated at the entrance to the cave.[4] By surviving traditions the monks are only able to indicate the cave in which the Abuna Takla Haymanot lived, and to believe that the good Za Mika'el still lives in a cave under the small church nearby. That the latter was the living place of the saint is to be excluded because of the position of the entrance, which is like a small well with sides 50 cm. in length opening in the floor of the sanctuary. The opening is not large enough to ventilate the compartment and does not agree with the many summary descriptions in *Gadla Aragawi*, which are suggestive of a cave whose entrance is in a rocky wall, not in the pavement of a terrace.

Since the *Gadla* simply speaks of the mysterious disappearance of the saint, after the promise given to him by God in the *Kidan* not to allow the shadow of death to come near him but to hide him like the prophets Enoch and Elias,[5] we must assume that already at the beginning of the fifteenth century the burial place was forgotten, although in a peculiar contradiction the same book speaks of the tomb of Za Mika'el.[6] We believe that such ignorance occurred during one of those recurrent periods of extraordinary decadence the monastery of Debra Damo seems to have suffered (eleventh to thirteenth centuries and seventeenth century).[7]

As described previously, during the survey a hollow sound was noted in the floor of the large cave, suggesting the existence of an underground chamber (as there probably are under other caves on the same ledge); the entry to it may have been a well-like opening believed to have existed in the floor of the circular compartment off the south wall; thence there was and is perhaps a connexion with the space under the small church nearby. Thus we may suppose, though it is speculation, that these two subterranean rooms were a single complex which in all probability had at first no communication with the outside other than through the pit in the cave, and that at

[1] M. A. Oudenrijn, *op. cit.* p. 50.

[2] *Ibid.* pp. 61–62: 'Et notre père Aragawi lui dit: Bénis encore cette caverne, ma demeure, dans laquelle je suis debout avec Toi, et dans laquelle j'ai reçu le *Kidan*. Et il dit: Qu'elle soit bénie, cette terre à toi, sur laquelle tes pieds ont été posés, qu'elle devienne un remède salutaire pour quiconque prendra de sa poussière et s'en oindra. S'il y a quelqu'un qui est malade, que sa maladie soit enlevée de lui! Et celui qui en prendra avec foi, qu'il soit guéri de la maladie, même de la peste étrangère; et (cette poussière) fera voir des miracles dans celui auquel elle aura été appliquée. . . .'

[3] *Ibid.* pp. 62–66: 'Au temps de l'aurore, tandis que le cœur de Matyas s'inquiétait (parce qu'il ignorait) quand il disparaîtrait de leur compagnie (il alla voir et) il le vit debout en prière. Alors (Matyas) retourna où il avait été auparavant pour faire la prière. Et il revint de nouveau à la troisième heure, entra dans la grotte et ne le trouva plus parce qu'il avait été caché. Il ne trouva que la croix et la crosse seulement. . . .'

[4] *Ibid.* p. 66: 'Sous lui (Yohanni), ses fils bâtirent la chapelle à l'entrée de la grotte pour servir comme lieu de sépulture pour les moines, et comme lieu de salut pour tous qui venaient prendre de la poussière là où les pieds de Saint Aragawi s'étaient posés.'

[5] M. A. Oudenrijn, *op. cit.* p. 60.

[6] *Ibid.* p. 60: 'Et qui aura, le jour de la fête, récité une prière sur ton monument j'exaucerai sa prière et sa demande sans tarder. . . .'

[7] C. Conti Rossini, 'Pergamene di Dabra Dammò', *Riv. Studi Orientali*, xix (Roma, 1940), pp. 54–55.

a later period, when the small church was constructed, an opening was made at the southern extremity of the complex, an opening which exists today in the floor of the sanctuary of the small church.

From Gobat's description[1] we know that the cave shown to him by the monks as the actual refuge of the good Za Mika'el agrees with our cave: in fact it is the only one, together with the small oval cave situated to the left of the opening, to have a kind of large vestibule. On the other hand, the actual belief of the monks is contradictory to the *Gadla Aragawi*, from which it is known that the living place of the saint in his visible life and his poor refuge after his disappearance was a single room. We think that the supposition that our cave was lived in by the good Za Mika'el explains the existence of the bas-reliefs, to decorate a particularly holy room. We think also that in early times a small chapel was built at the entrance to the vestibule. This supposition is strengthened by the fact that a series of holes has been made in the rock above the entrance; these could have served for fixing the ends of a number of small beams holding the roof (probably of straw) of a little forebuilding (pl. XIII *c*).

There remains to be considered the problem of the rooms under the chapel and, with every probability, under our cave as well. We have seen how, at the time of the seventh superior, Yohanni, a chapel was built at the entrance to the cave where the saint disappeared, *as a place of burial for the monks*. On the other hand, the *Gadla Aragawi* speaks of the grave (*Martul*) of Za Mika'el. It is logical to think that beneath the small church and perhaps the cave there exist some tombs. But are these tombs (probably of old dignitaries of the monastery) alone, or are they grouped around a more holy tomb, that of the holy founder of the monastery?

That the small church in its present form should be of a relatively recent date, and not before the fifteenth century, is apparent from its plan, in which the *maqdas*[2] is isolated from the external structure. But the walls surrounding the *maqdas*, on the inner side of the encircling corridor, as described above, are very old. The carved decoration on the doors in the inner wall, giving on to the sanctuary, is similar in style to the Byzantine–Coptic decoration in the large church (fig. 15).

That our cave was an object of veneration from a very early period is shown by the decoration of its walls, and by some fragments of pottery and some gold coins found during a small excavation we conducted. The first fragment of pottery (9 cm. × 7 cm.) belongs to a large hemispherical cup, is of light chocolate colour, well baked, and appears to have been polished on the outside; it has two parallel grooves around the body, one immediately below the mouth, the other 3·2 cm. lower. The second fragment (3·5 cm. × 3 cm.) is of a rather reddish clay, well baked, and has, immediately below the rim, a decoration of four grooves of various sizes, parallel, as on the first fragment. Both give the impression of a type of pottery different in form from that actually used by the people of Tigrai, and attributable to Axumite craftsmen.

Together with the above-mentioned fragments of pottery were five gold coins: the *dīnārs* of the Umaiyad and ʿAbbasid Caliphs, from the Umaiyad Caliph ʿAbd al-Malik dated from A.H. 84 = A.D. 703, to the last belonging to the ʿAbbasid Caliph

[1] S. Gobat, *op. cit.*

[2] *Maqdas* = sanctuary; the part of the church where the *tabot* is put.

Al-Musta'īn billah from A.H. 251 = A.D. 865. It is surprising to find such coins, and we think that they are ex-voto offerings to the deceased, as a result of war expeditions against Moslem peoples. They are not the only Arabic coins we met with in the monastery, since the former head of the monastery, Abba Gabra Madhen Yared, informed us that in the past there were frequent discoveries of gold and silver coins in the territory of the monastery and limited to the cemetery area of the *amba* where our cave is to be found. Such finds were given to the *qes gabaz* (treasurer) who melted them down to make objects for the use of the community. Exploration and a minor excavation in the area of the cemetery revealed numerous coins, all Arabic. They appeared to have been scattered at no great depth (15–30 cm.) in small groups, as they would have been scattered in soil moved during the completion of the filling of tombs underneath. Some were of silver (*dirham*), and some of gold (*dīnār*). They belonged to various Umaiyad and 'Abbasid Caliphs from 'Abd al-Malik A.H. 78 = A.D. 697 until Caliph Ar-Rāḍī billah of A.H. 323 = A.D. 934. They were in such an excellent condition that they had circulated probably very little.

The monks stated that never to their knowledge in the history of the monastery had a real treasure been found like that discovered in 1940 near the small church,[1] or those found fifty years ago near the church of St. John (Enda Yohannes), in the district of Daroca, or those discovered in 1934 near the monastery of Debentanti in Waldebba.[2] The discoveries in Debra Damo were small groups of gold and silver coins, which appear on the rocky ground of the ledge after washouts following heavy rain when small landslips occur in the slope above.

It is premature to define the meaning of this relative abundance of Arabic coins of the eighth to tenth centuries A.D., in contrast with the evident rarity of Axumite coins found in the soil of the monastery, of which the only example known to us is a piece of copper of 'Armah,[3] given to us by Mamher Takla-Ab Tasfay, and found in 1935 near the principal church of the monastery.

We have the impression that not much is known of the history of Ethiopia during the five or six centuries preceding the thirteenth century, above all regarding the pressure exerted on the Axumite kingdom by pastoral peoples coming from the north (the Begia?), by the pagan populations of the northern central area of Ethiopia,[4] and from the beginning of Islam and its culture: the recent investigations of C. Conti Rossini and of E. Cerulli give us a picture of wealthy Islamic Sultanates in Enderta and even in Shoa in the tenth and eleventh centuries.[5] And what is the meaning of the rarity of Axumite coins at Debra Damo? Perhaps this is the element proving Conti

[1] In 1940 in the cliff below the terrace on which the small church stands was found, hidden in a natural cavity of the rock and covered by a layer of earth 20 cm. thick, a little box of wood containing a noteworthy number of gold coins, all Indian, very well preserved, and belonging to the dynasty of the Great Kushans (Kadphises II, Kaniskha, Huviskha, Vasu Deva: first to third centuries A.D.).

[2] At Daroca, in Tigrai, a pot was found containing a hundred gold coins, and at Debentanti a large pot with over 500 gold coins, and some small crosses of gold. Such discoveries were made by the local inhabitants, who melted down the metal.

[3] This example is very well preserved, with inlaid gold in the reverse.

[4] E. Cerulli, 'L'Etiopia medievale in alcuni brani di scrittori arabi', *Rassegna di Studi Etiopici*, iii (Roma, 1943), pp. 272–94.

[5] C. Conti Rossini, 'Necropoli musulmana ed antica chiesa cristiana presso Uogri Haribà nell'Endertà', *Riv. Studi Orientali*, xvii (Roma, 1938), pp. 399–408. E. Cerulli, 'Il sultanato dello Scioa nel sec. XIII secondo un nuovo documento storico', *Rassegna di Studi Etiopici*, i (Roma, 1941), pp. 1–42.

Rossini's thesis of the discontinuance of Axumite coinage towards the end of the seventh century or the beginning of the eighth century.[1] And what does the discovery mean of coins of Gersem and Hataz, the last Axumite kings known today through numismatics, near a church of Addi Abbona, beyond Macalle, towards the Uoggerat, together with scrapers of obsidian and fragments of rather primitive pottery, very different from the two fragments found in our cave?[2]

According to the best information we have regarding Christianity in medieval Ethiopia, our cave appears to be of noteworthy interest. The facts lead us to believe that we are confronted with a room of particularly sacred and venerated character and of great antiquity, whose mural decorations deserve accurate comparison with other manifestations of Eastern Christian art.

HISTORY OF THE MONASTERY

Because of the absolute lack of documents written before the fourteenth century,[3]

[1] C. Conti Rossini, 'Monete Aksumite', *Africa Italiana*, vol. i, n. 3 (Roma, 1927), pp. 182–4.

[2] A. Mordini, 'Informazioni preliminari sui risultati delle mie ricerche in Etiopia dal 1939 al 1944', *Rassegna di Studi Etiopici*, iv (Roma, 1946), p. 150, n. 2.

[3] A document that could be supposed to give us valuable information on the date of foundation of the monastery and its history is the *gadla* (*gadl* = biography, the spiritual battle) 'Aragāwī—the history of the head of the Nine Saints of Ethiopia—(see I. Guidi, *Il Gadla ʿAragawi*, Memorie della R. Accademia dei Lincei, Classe di Scienze morali, storiche e filologiche, vol. ii, parte 1° (Roma, 1895); M. A. van den Oudenrijn, *La Vie de Saint Za Mika'el 'Aragāwī* (Fribourg, 1939), which has been shown to be absolutely without historical foundation, being a pious narrative written by a monk of Debra Damo towards the end of the fourteenth century or the first years of the fifteenth. Compare with the legends (Part I), pp. 28–29.

In this romantic narrative it is said that Za Mika'el, called 'Aragāwī' (= old), son of Yeshaq, King of Rom (geographical term vaguely symbolizing the Christian kingdoms of the west, or possibly the Byzantine empire) and of ʿEdna, went when very young to Dawnis, in the Thebaid, near the famous anchorite St. Pachomius. Subsequently he was transferred to Axum in Ethiopia, accompanied by his mother and the Seven Saints: Abba Liqanos of Questentenya (Constantinople), Abba Yemʿata of Qosyat, Abba Sehma of Antioch, Abba Guba of Cilicia, Abba Afse from Asia, Abba Pantalewon from Romya, Abba Alef of Cesarea. In Axum they were joined in a miraculous way by the father of Za Mika'el, Yeshaq, who took the monastic habit. In the sixth year of the reign of Tazena, father of Kaleb, King of Axum, the Nine Saints separated themselves respectively: Liqanos to Debra Quanasl, Yemʿata in Garʿalta, Sehma to Sedya, Guba near Madara (Senafe), Afse to Yaha (Yeha), Pantalewon near Axum, Alef to Ahsʿa (Behza), Yeshaq (said in following Garima) to Madara. When Za Mika'el went—accompanied by his mother and his disciple Matyas—into the region east of 'Eggala, he continued his journey, until in Tigrai he rested under a big tree (ficus daro) still existing in our times. From this place called *'Awlʿa Mahbar* (= the tree of the monastery), they saw for the first time the mountain of Damo, and there arose in him immediately the desire to make his habitation on its summit.

He tried to reach the top, and could not because the mountain top was surrounded by high cliffs. Then he tried to find another mountain, but was not satisfied, and returned to Damo. After three days and three nights of prayer in the place where the entrance to the monastery now is, the archangel Michael appeared to Za Mika'el and informed him that God invited him to the top of the mountain. There then appeared on the edge of the top a large serpent, which came down towards the saint, and lifted him on to the top of the mountain. His disciple made a long wooden ladder and gained the top in this way.

After this, King Kaleb, having conquered Southern Arabia, took the monk's habit, leaving his kingdom to his son Gabra Masqal. The latter visited Za Mika'el, and ordered the construction of the main church (Enda Abuna Aragawi), and made large donations to the monastery. For the construction of the church a ramp was made up the cliff, being demolished afterwards, and leaving the only means of access to the monastery to be by means of ropes, in remembrance of the serpent which helped the holy founder to gain the summit of the mountain.

Za Mika'el adopted for his habitation a cave where he lived in perpetual penitence. Meanwhile the monastery achieved great fame throughout Ethiopia; famous saints, amongst whom was Yared (composer of a typical form of religious music which he learned from angels) who came to find him. The number of monks reached 600. To the end of his life Za Mika'el had the vision of the Holy Ghost and gave the *Kidan*, typical in the life of Ethiopian saints, in which our Lord promised to the saint particular benidictions and privileges for him and all his followers. Our Lord promised amongst other things that Za Mika'el, like the prophets Enoch and Elias, would not be touched

the origins of the monastery of Debra Damo remain obscure. Systematic archaeological research on the *amba* may reveal evidences of human settlement in that place at a very early age, probably contemporary with the final Christian phase of the kingdom of Axum.

The carved wooden panels depicting animals, which form the sumptuous wooden ceiling in the inner entrance hall of the large church,[1] point to a happy and up till now unknown period of figurative Ethiopian art. Experts must now establish to what influences of oriental art it must be attributed. Perhaps we have to deal with the last phase of a movement of naturalistic art, developed in the latest period of the kingdom of Axum (eighth to eleventh centuries), or perhaps we must advance the dating as far as the fourteenth century. Certainly it cannot be later than the fourteenth century, taking into consideration the timber bas-reliefs from the old church of Asmara,[2] now preserved in the Museum of Eritrea; these bas-reliefs derive undoubtedly from those of Debra Damo, and are perhaps attributable to the fifteenth century, but they are far from the prototype in that the workmanship is rougher, and there are differences in the technique of carving, and in subject matter. These differences are so noticeable that we must separate the two works by a great number of years, if not centuries.

Important evidences of the history of the monastery well before the eleventh century exist in the coins found in the area. Besides the single copper coin of the Axumite king ʿArmah (perhaps seventh century) there were also found in the cemetery area of the monastery numerous coins which can be divided into two distinct groups. The first group consists of many Indian coins of gold, found together, of great antiquity. They are coins of the Indo-Turkish dynasty of the Great Kushans (Kadphises II, Kaniskha, Huviskha, Vasu-Deva) belonging to the period from the first to the third century A.D., whereas the second group is represented by numerous Arabic coins in gold and silver, Umaiyad and ʿAbbasid, from the Caliph ʿAbd al Malik until Caliph Ar-Rāḍī billah (from A.H. 78–A.H. 323 = A.D. 697–A.D. 934), coins in such a state of preservation that we must conclude few had circulated before their being buried in the soil of Debra Damo.

Another element in favour of the great age of the monastery is provided by the recovery, in a recess of the large church of Enda Abuna Aragawi, of fragments of textiles, undoubtedly of non-Ethiopian origin, which probably served originally to wrap relics and to cover sacred objects. These textiles, mainly of silk but also of wool or linen, are of three types: the first consists of a few of Coptic origin (sixth to eighth century); the second, very numerous, belongs to the Tulunid and Fatimid textile art of the ninth to twelfth centuries; the third, on the contrary, is associated with technical and stylistic elements of Mesopotamia, and especially of Iran, of the seventh to tenth

by death, and that the tomb of his mother 'Edna (buried in the monastery) would not be seen by anyone until the day of judgement.

The following day (aged 92 years) Za Mika'el vanished mysteriously in his cave. It was the 14th day of the month of Tequemt, in the time of King Gabra Masqal.

[1] *Deutsche Aksum-Expedition*, Band II, *Ältere Denkmäler Nordabessiniens*; Abs. F, 'Zwei früh-mittelalterliche Kirchen', (2) 'Die Klosterkirche von Debra Damo' (D. Krencker), pp. 182–94, Abs. 373–419 (Berlin, 1913). A. Mordini, 'Il soffitto del secondo vestibolo dell'Enda Abuna Aragawi in Dabra Dammò', *Rassegna di Studi Etiopici*, vi, fasc. i (Roma, 1947), pp. 29–35, figs. 1–39.

[2] *Deutsche Aksum-Expedition*, Band II, Abs. F, (b) 'Die alte Kirche zu Asmara', pp. 195–98, Abs. 420–3.

centuries. (Further inscriptions in Arabic deciphered since the above was written are dated A.H. 278 (A.D. 891–2), of the ʿAbbasid Caliph Al Muʿtamid 'ala ʿllah; A.H. 292 (A.D. 904) of the ʿAbbasid Caliph Al-Muktafi billah; A.H. 330 (A.D. 941–2) of the ʿAbbasid Caliph Al-Mutaqqi li'llah.

These remains add to the information already given by the ample series of ceramic fragments found in excavations conducted in various parts of the monastery from 1938 until 1941. Dating is possible by comparison with other pieces of ceramics found in various parts of Tigrai, Agamé, and Enderta, together with Axumite or Arabic coins, the latter dating from the eighth to the thirteenth centuries. We may assume that Debra Damo was already considered a place of particular sanctity at the end of the ninth century, and that its present church must have had its origin in a Christian building of those times, perhaps superimposed on an earlier building of pre-Christian origin.[1] It appears also from the discovery of coins that the monastery must have had an important position, not yet well defined, in the first contacts between Christian Ethiopia and the Moslem community of the south, which, as shown by recent Italian researches, was already flourishing in the eleventh century.[2]

Of much interest is the persistence in the oral traditions of the monastery of the story of the hostile queen who reduced the kingdom of Axum to ruins, killing the king; her action seems really to have been between 970 to 980, as E. Cerulli has demonstrated, on the basis of a hitherto unknown passage from the *Kitāb ṣūrat al-arḍ* by Ibn Ḥawqal.[3] This pagan queen, according to the narrator Abba Hayla Maryam, conquered Debra Damo, profaned the church and built a town on the top of the plateau.[4] Such information coincides with data furnished in 1940 by the deceased prior Mamher Takla-ab Tasfay, who indicated one of the big cisterns excavated in the rock, which conserve the water-supply of the monastery, and confirmed that this has been excavated by a pagan population who were ruled by a queen, and that it had a religious origin for the worship of a water spirit. This recalls the pagan queen who devastated the land, the *malikah ʿalā Banū al-Hamuyah* (see the existence of information on the cult of water spirits under the ancient Agaw population).[5] It is a possibility not to be excluded in the present state of our knowledge that she belonged to Islam. Recent researches of E. Cerulli have revealed the existence of women invested with sovereign power in many Moslem states of Ethiopia from the eleventh to the fourteenth centuries. Nor must we consider these customs exceptional.[6] The discovery in the soil of the monastery of such a considerable number of Arab coins of eighth to tenth-century

[1] D. H. Matthews, 'The Restoration of the Monastery Church of Debra Damo, Ethiopia', p. 196, *Antiquity*, vol. xxiii (London, 1949).

[2] U. Monneret de Villard, 'Note sulle influenze asiatiche nell'Africa Orientale', *Riv. Studi Orientali*, xvii (Roma, 1938), pp. 303–49. C. Pansera, 'Quattro stele musulmane presso Uogher Haribà sull'Endertà (fine del IV secolo dell'Egira)', *Studi Etiopici raccolti da C. Conti Rossini*, pp. 3–6 (Roma, 1945), E. Rossi, 'Iscrizioni funerarie arabe musulmane del paese degli Arussi nel Museo Coloniale di Roma', *Rassegna di Studi Etiopici*, anno ii (Roma, 1942), n. 3, pp. 278–81.

[3] E. Cerulli, 'L'Etiopia medievale in alcuni brani di scrittori arabi', *loc. cit.* iii (Roma, 1943), n. 3, pp. 272–4. J. Perruchon, 'Notes pour l'histoire d'Éthiopie: lettre adressée par le roi d'Éthiopie au roi Georges de Nubie sous le patriarcat de Philothée', *Revue Sémitique* (Paris, 1893), pp. 71–76, 360–72; 'Vie de Cosmas patriarche d'Alexandrie', *Revue Sémitique* (Paris, 1894), pp. 78–98.

[4] D. H. Matthews, *op. cit.* p. 200.

[5] C. Conti Rossini, 'Note sugli Agau, II, Appunti sulla lingua Awiya del Denghelà', *Giornale della Società Asiatica Italiana*, xviii (Firenze, 1905), pp. 111–22.

[6] E. Cerulli, 'Il sultanato dello Scioa nel secolo XIII secondo un nuovo documento storico', *loc. cit.* i (Roma, 1941), n. 1, pp. 1–42.

date alone shows that in the Middle Ages there existed nearby a Moslem community of notable importance and wealth.

Probably following the devastation of the Axumite kingdom made by this queen, or because of the expansion of the population from the north (the Begia?), an expansion which probably had a precedent some centuries before,[1] it seems that the sovereign power was transferred to the Agau dynasty of the Zagué. Debra Damo must have been involved in the consequences of the transference of the royal favour to the neighbouring monastery of Debra Libanos (ʿEnda abbā Maṭā ʿza ʾAhām), a favour which seems to have continued through the twelfth century and a good part of the thirteenth, for the discovery of feudal records, certainly authentic, of King Lālibalā, in a manuscript belonging to the medieval monastery, includes one dated 1225.[2] It is possible that for Debra Damo it was a period of obscurity and decadence, though there are reasons for thinking that the monastery enjoyed particular fame and sanctity in the thirteenth century before its hour in the fourteenth century when, following the great rebellion of Yaʿbika-Egziʿ in 1320, it appears probable that King ʿAmda-Syon reversed the royal favour against Debra Libanos, which fell into disgrace for its attachment to the past dynasty of Zagué and because it had taken the side of the rebel leader.[3]

Resulting from the traditions, already existing in the fifteenth century, that Debra Damo had in the late thirteenth century a noteworthy fame and influence, it attracted monks and disciples who came from far countries to perfect their education. For this reason, in the second half of this century, the famous monk of Shoa, Takla Haymanot, came to receive the garb and symbols of a monk from Abba Yohanni, superior of the medieval monastery. In the *gadl* (biography) of Takla Haymanot edited by Budge it is said that the saint lived twelve years at Debra Damo (from 1267 to 1279 according to the calculations of the editor of the text).[4] In the monastery these traditions are still preserved, and there is shown a cave (situated near the small church, pl. XIII *b*) which was once used as a living place by the saint during his stay at Debra Damo. Even the holy monk of Amhara, Basalota Mika'el, was introduced to Debra Damo to study the commentaries of the Holy Scriptures in the fourteenth century.[5]

During the thirteenth, fourteenth, and fifteenth centuries there was an intense literary activity at Debra Damo, as is shown by the remains of a remarkable quantity of manuscript fragments, some of which can be considered probably the most ancient Ethiopian writings on parchment known up to the present.[6] This activity demonstrates that Debra Damo had attained a position of prestige and wealth, probably as a result of the donations of ʿAmda Syon I; some of the apocryphal acts are shown to have been attributed to King Gabra Masqal, a mythical king, but we must assume that Gabra Masqal was the royal name of ʿAmda Syon I.[7]

[1] A. Mordini, 'Su di un nuovo titolo regale aksumita', *Rassegna di Studi Etiopici*, viii (Roma, 1949), 8–9.

[2] C. Conti Rossini, 'L'Evangelo d'oro di Dabra Libanos', *Rendiconti della R. Accademia dei Lincei*, x (Roma, 1901), 177–219.

[3] C. Conti Rossini, 'Pergamene di Debra Dammò', *loc. cit.* xix (Roma, 1940), 47, 54–55; A. Mordini, 'La Chiesa ipogea di Ucrò (Amba Seneiti) nel Tigrai', *Annali dell'Africa Italiana*, anno II (Roma, 1939), n. 2, p. 526.

[4] E. A. Wallis Budge, *The Life of Takla Haymânôt in the version of Dabra Libânôs* (London, 1906).

[5] C. Conti Rossini, *Acta S. Basalota Mika'el et Anorewos*, p. 19, Corpus Script. Chr. Orient., Script. Aeth. ser. ii, t. xx (Roma, 1905).

[6] C. Conti Rossini, 'Pergamene di Debra Dammò', *loc. cit.* p. 46.

[7] *Ibid.* pp. 47, 54.

In the fifteenth century it seems that Debra Damo was of much importance, for its superior, Nob, was requested to mediate in the dispute arising between king Zarʿa Yaʿqob and the monastic community of the north of Ethiopia regarding the observance of the sabbath. Afterwards Nob was exiled because he kept with him the leaders of the conspiracy against Zarʿa Yaʿqob; however, about 1471 the successor of the latter, King Baʿeda Maryam, gave 500 ounces of gold to the monastery[1] during the war against the Dobʿa.

At the end of the first half of the sixteenth century, Debra Damo with its impregnable position offered asylum to the royal family during the war of Grañ. King Lebna Denghel sojourned there for a long time and died on the 2nd of September 1540 at Addi Caieh. His mortal remains were transported to the monastery and even now are conserved in the sacristy of the large church.[2] His successor Galawdewos sought refuge and was besieged there by the Moslems for one year.[3] In the year 1541 the Portuguese of Dom Cristovam da Gama came to Debra Damo to liberate the queen Sabla-Wangel, who had been imprisoned for about four years, and after having dispersed the militia of Grañ, which was besieging the mountain, they used the monastery as a secure store for arms and ammunition during their expedition.[4]

A few years later, in 1557 or 1558, the Turkish Pasha Uzdamer, coming from the Yemen with much artillery, succeeded in taking Debra Damo, massacring the monks, and profaning the church.[5] It seems strange that on such an occasion the large church of Enda Abuna Aragawi was not burnt and completely destroyed,[6] and even stranger considering the information given by an anonymous writer in the chronicle of Galawdewos that the church of Debra Damo was reduced to a heap of ruins similar to a 'shed in a garden of grape vines'. Either the chronicler is wrong or we must deduce that the church of Enda Abuna Aragawi was extensively restored in the second half of the sixteenth century. Such a restoration would be plain to see, but nothing of the kind has been found by those who within the last fifty years have examined and studied the monument. Moreover the wooden ceiling and the frieze decorating the central nave and sanctuary are earlier than 1540.

An undoubted fact in the seventeenth century is that Debra Damo passed through a period of decadence and obscurity: the Jesuits do not mention this important monastic community.[7] Again, among the numerous manuscript fragments from the monastery little dates from the late sixteenth and the seventeenth centuries. The absence of writings from this epoch indicates a cessation of literary activity amongst the monks in the circumstances of their precarious existence.[8]

In the eighteenth century we see that Debra Damo experienced a brilliant revival

[1] C. Conti Rossini, 'Gli Atti di Abba Yonas', *Rendiconti Acc. Lincei* (Roma, 1903); J. Perruchon, *Les Chroniques de Zarʿa Yaʿeqob et de Baʿeda Maryam rois d'Éthiopie* (Paris, 1903), pp. 12, 109, 179

[2] C. Conti Rossini, 'Pergamene di Debra Dammò', *loc. cit.* p. 55, note 8. A. Mordini, 'Informazioni preliminari sui risultati delle mie ricerche in Etiopia dal 1939 al 1944', *loc. cit.* iv (Roma, 1946), 147.

[3] C. Conti Rossini, 'Pergamene di Debra Dammò', *loc. cit.* p. 56, notes 1 and 2.

[4] *Ibid.* p. 56, n. 3, 4. See also: Conzelman, *Chronique de Galadewos*, p. xix.

[5] W. E. Conzelman, *Chronique de Gâladewôs (Claudius) roi d'Éthiopie*, pp. 74, 164, Bibliothèque de l'École des Hautes Études, fasc. 104 (Paris, 1895).

[6] A. Mordini, 'Informazioni preliminari . . .', *loc. cit.* p. 146.

[7] P. Paez, *Historia Aethiopica*, i, 579–80. (Roma, 1905).

[8] C. Conti Rossini, 'Pergamene di Debra Dammò', *loc. cit.* pp. 54, 57.

of monastic life: there are numerous written fragments from this century made in the monastery. Bruce states that the ecclesiastics of the neighbourhood were active slave merchants.[1]

A mass of information about Debra Damo is available in the nineteenth century, beginning with the inscriptions on a painting on canvas discovered in the sacristy of the large church. We know that this picture was brought from Jerusalem about 1807–8 by a certain Abba Gabra Masih, monk of Debra Damo, who completed the pilgrimage to the Holy Sepulchre.[2] Subsequently, during the course of this century, the monastery was visited by some European travellers who left interesting observations. Among these we must cite S. Gobat who visited Debra Damo in 1830,[3] and Mgr. Giustino de Jacobis who lived in the monastery in 1843. The latter has left two accounts which deserve to be published.[4]

In 1906 Debra Damo was the object of study by some members of the Deutsche Aksum-Expedition under the guidance of E. Littmann. Dr. S. Krencker made an architectural study of the large church, his research being valuable for its amplitude and accuracy.[5]

From that time Debra Damo has remained in the front rank of Ethiopian monasteries, under the various governments that have succeeded one another in Ethiopia since 1900 onwards. During the Italian occupation the author remained for many months in the monastery, and collected archaeological, historical, and ethnological material. A motor-road was constructed from Atzera (on the Enticcio–Adigrat road) up to the entrance to the monastery; and the main church (which was in a dangerous condition in 1938) was temporarily shored up by the architects Davico and Puglisi of the Archaeological Mission in Axum in 1939.[6]

During the British occupation the monastery was the object of study by Mr. D. R. Buxton.[7] In 1948 he drew the attention of the British Council in Addis Ababa to the fact that the structural condition of the large church was precarious; the roof over the central nave had collapsed, and it was necessary to restore the whole church which was rapidly becoming a ruin.

Through the enlightened munificence of the Emperor Haile Selassie the British Council obtained the sum of £5,000 for the work of restoration of the monument, which was carried out by the architect Derek H. Matthews, the work being completed in 82 working days.[8]

Debra Damo has long preserved its notable religious and political importance,

[1] J. Bruce, *Voyage*, v, 182 sqq.

[2] L. Ricci (note), in A. Mordini, 'Il Convento di Gunde Gundiè', pp. 68–70, figs. 31–33, *loc. cit.* xii (Roma, 1954).

[3] S. Gobat, *op. cit.* p. 315.

[4] L. Ricci (note), in A. Mordini, *Il Convento di Gunde Gundiè*, pp. 64–65.

[5] *Deutsche Aksum-Expedition*, Band II, pp. 182–94, Abs. 373–419; Band III, p. 50, Abs. 149.

[6] A. Mordini, 'Informazioni preliminari . . .', *loc. cit.* pp. 145–8; 'Il Soffitto del secondo vestibolo dell'Enda Abuna Aragawi in Dabra Dammo' *loc. cit.* pp. 29–35. A. Mordini, 'Un'antica pittura etiopica', *Rassegna di Studi Etiopici*, xi (Roma, 1947), 29–32; L. Ricci (note), in A. Mordini, *Il Convento di Gunde Gundiè*, pp. 68–70.

[7] D. R. Buxton, 'The Christian Antiquities of Northern Ethiopia', *Archaeologia*, xcii (Oxford, 1947), 6–12 (extract); *Travels in Ethiopia* (London, 1949), pp. 136–40; 'Ethiopian Rock-hewn Churches', *Antiquity*, xcii (reprinted in *Travels in Ethiopia*).

[8] D. H. Matthews, 'The Restoration of the Monastery Church of Debra Damo, Ethiopia', *Antiquity*, xxiii (London, 1949); 'Ethiopian Monastery Church, Restoration at Debra Damo', *The Builder*, No. 5607, 1950.

continuing to be one of the most venerated places of pilgrimage and burial in the whole of Ethiopia.

NOTE ON THE CLOTHS FOUND AT DEBRA DAMO

By GASTON WIET

Professor of Arabic Language and Literature, Collège de France

Étoffe n°. 1 (pl. XV *d*).

بسم الله الرحمن الرحيم بركة من الله لعبد الله احم[د] الإمام المعتمد على الله امير المؤمنين [أيده] الله بمصر سنة ثمان سبعين مأتين

Au nom de Dieu Clément, Miséricordieux! Bénédiction de Dieu à l'esclave de Dieu Aḥma(d), l'imam al-Mu'tamid ala llah, émir des croyants, — que Dieu (le soutienne!) — à Miṣr (c'est-à-dire le capitale Fusṭaṭ), en l'année 278 (891).

Sur l'étoffe no. 2 (pl. XV *e*), on lit, répété dans les deux sens, *al-mulk lillah*, 'le pouvoir est à Dieu'.

Ce tissu est de fabrication égyptienne et peut être daté de la fin du X^e^ siècle ou de la première moitié du XI^e^.

Sur l'étoffe no. 3 (pl. XV *c*) on lit sur les trois registres des caractères arabes déformés, ce qui est fréquent sur les tissus égyptiens de la première moitié du XII^e^ siècle. Il s'agit vraisemblablement de la répétition de la formule fatimide *nasr min Allah*, 'secours de Dieu'.

L'étoffe no. 4 (pl. XV *b*) est plus délicate à dater sur photographie, autrement dit, il est difficile d'affirmer qu'elle est réellement postérieure à l'islam. Comme il y a du rouge, il conviendrait de l'analyser pour savoir quelle est la nature de ce rouge (il y a sur la question une étude de Pfister, qui a montré que la conquête arabe avait interrompu le contact avec l'Inde). Le motif est une combinaison byzantino-sassanide, combinaison qui existait avant l'islam en Syrie comme en Égypte. Il faudrait étudier de plus près les détails, notamment les bordures. Je pense toutefois que nous avons là un tissu des VI^e^–VII^e^ siècles.

a. The Large Church before repair, from the north-west. The newer building in the foreground is a disused bell-house; the main gate is on the extreme left, with an upper room

b. The rope is the only means of access to the Monastery. The cliff-face encircles the flat-topped mountain, on top of which are the Monastery buildings

c. The Lower Church, situated on its ledge below the top of the *amba*

Photos. D. H. Matthews, by courtesy of 'Antiquity'

a. The east end of the Large Church, after completion of the restoration work; a priest in his traditional blue cloak, narrow trousers, and hat is walking under the olive trees, carrying a small silver hand-cross

b. The Large Church: the west front, after restoration

Photos. D. H. Matthews

a. The Large Church: the east end, after restoration

b. The north side, after restoration, showing the inner walled enclosure within the main compound, containing a rock-hewn cistern

c. The north side, after restoration

d. The south side, after restoration

Photos. D. H. Matthews

a. The timber dome over the sanctuary in the Large Church. Formerly containing timber infilling panels with paintings of saints, the dome is now covered with cloth. A portion of the timber frieze containing wooden panels carved with geometrical and meander patterns is visible. Note the diagonally placed timbers carrying the dome

b. The sanctuary of the Large Church, normally screened from all except the head priests. The baldachino, surmounted by a silver cross, is designed to hold the sacred tablet, the *tabot*. The wrought iron lamp, the wooden candlestick, and the stool are also illustrated in figs. 21, 22

c. The doorway between the porch and the vestibule with the carved ceiling, also illustrated in pl. VII *c*

d. An external window photographed during the restoration work. The system of construction is typical, and similar to that in pl. IV *c*

Photos. D. H. Matthews, by courtesy of 'Antiquity'

a. The Large Church: the south side of the chancel arch, and a portion of the frieze surrounding the nave

b. The north side of the chancel arch

Photos. D. H. Matthews

a. The Large Church. Small window at the east end, lighting the room above the dome, photographed during restoration

b. Window inside the porch, lighting the stair

c. Portion of the nave frieze and monolithic columns

d. Interior looking towards the west doors; drums in the foreground

Photos. D. H. Matthews

a. The Large Church: dome ribs, with cloth cover removed; note the grooves which formerly held timber panels

b. The north projection, seen from inside the partially demolished north loft, during reconstruction

c. The west porch

d. The carved ceiling

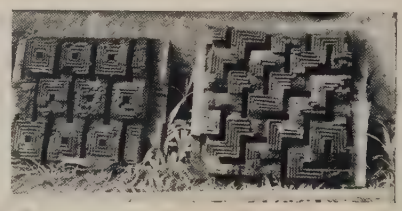
Photos. D. H. Matthews

a. Group a

b. Group b

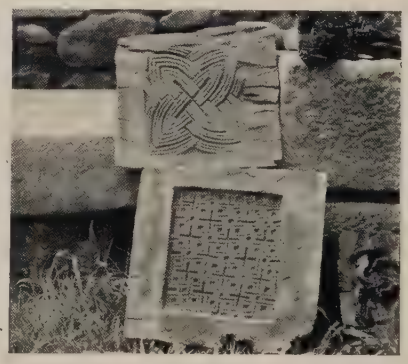
c. Group c

d



e

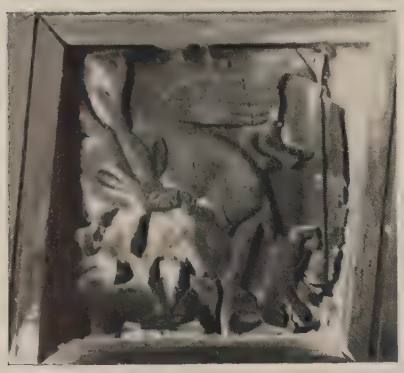
f



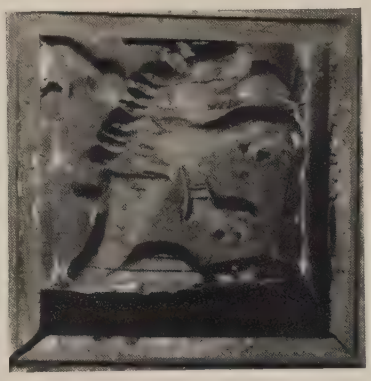
The Large Church: the carved ceiling, groups *a*, *b*, and *c*
d, *e*. Panels photographed when removed from the ceiling during restoration
f. Loose panels lying in the church
Photos. D. H. Matthews

a. 4 *a.* 5

a. 3



a. 2



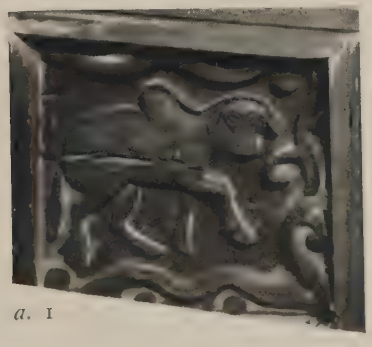
a. 8

a. 6

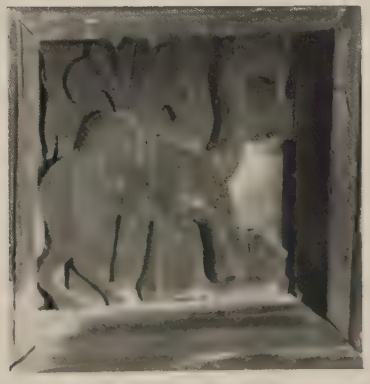
a. 7

a. 10

a. 9



a. 1



a. 12

The Large Church. Ceiling panels, group *a*.

Photos. D. H. Matthews

b. 1

b. 4

b. 8

b. 7

b. 5

b. 2

b. 11

b. 10

b. 9

b. 6

b. 3

The Large Church. Ceiling panels, group *b*

Photos. D. H. Matthews

c. 9

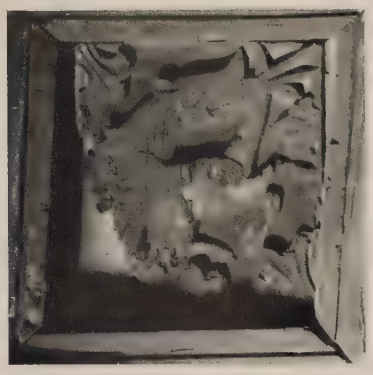
c. 8

c. 2

c. 3

c. 10

c. 13



c. 5

c. 4

c. 11

c. 12

c. 14

c. 15

The Large Church. Ceiling panels, group *c*

Photos. D. H. Matthews

a. The Lower Church. Principal entrance

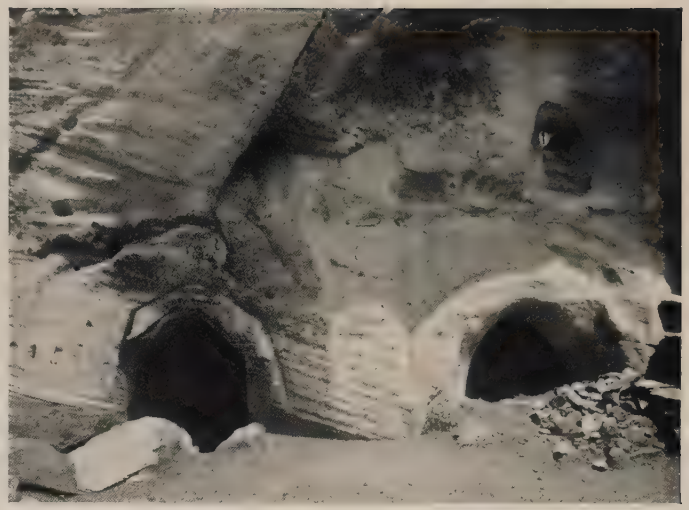
b. The Lower Church. Rear elevation

c. The Lower Church. Rear elevation

d. Steps from the ledge up to the top of the *amba*

Photos. A. Mordini

a. Burial zone near to the Lower Church



b. Funerary caves near the Lower Church

c. Entrance to the Cavern with bas-reliefs

Photos. A. Mordini

a.

b.

c.

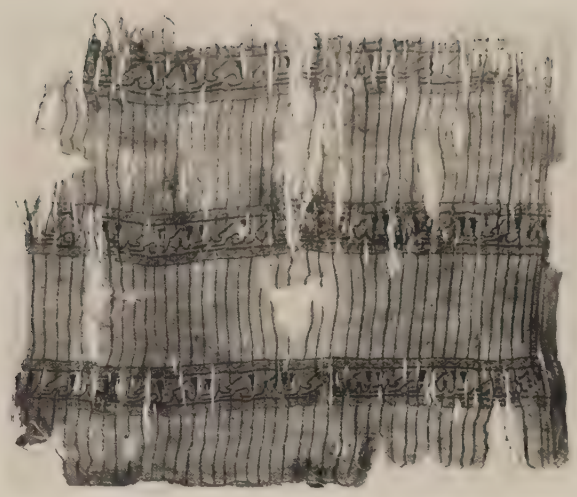
Bas-reliefs in the Cavern near the Lower Church

Photos. A. Mordini

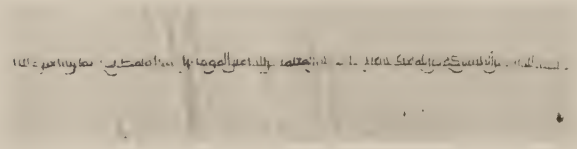
a. Linen with silk tapestry (Egypt or Ethiopia, end of eleventh century A.D.)

b. Wool and linen (Egypt or Syria. *c.* sixth or seventh cent. A.D.)

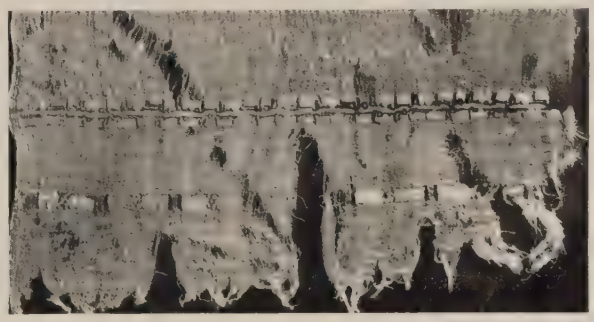
f. Linen embroidered in the private factory at Tinnis or Tuna in 292 H. (A.D. 905): Abbasid Caliph Al-Muktafi



c. Linen with tapestry (Egypt. Early twelfth cent. A.D.)

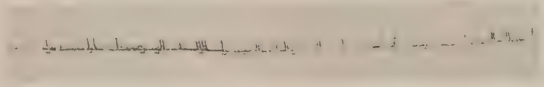


d. Linen embroidered in Misr in 278 H. (A.D. 891): Abbasid Caliph Al-Mu'tamid. *Read by G. Wiet*



e. Linen with tapestry (Egypt. Late tenth or early eleventh cent. A.D.)

g. Linen embroidered in Misr in 330 H. (A.D. 941/2): Abbasid Caliph Al-Mutaqqi: vazir Sulayman ibn al-Hassan



h. Linen embroidered in Misr in 329–331 H. (A.D. 940–3): Abbasid Caliph Al-Mutaqqi: Vazir Muhammed al-Qarāriti. *Read by E. Kühnel*

Photos. A. Mordini

Late Saxon, Viking, and Early Medieval Finds from York

By DUDLEY M. WATERMAN, Esq.

INTRODUCTION[1]

THE study of the Viking Age in this country has in the past remained largely the province of the historian, using the material afforded by the written sources and by the scientific investigation of place-names, and what systematic work has been done on the antiquities of the period, outside the fields of architecture and sculpture, illumination, and fine metalwork, is in considerable measure due to the labours of Scandinavian scholars. The contribution of archaeology to the problems of the period has until recently been quite inadequate and this state of affairs is all the more surprising in view of the important and controversial question of the origin of the English towns, the historical evidence for which, being both sketchy and ambiguous, has now been argued almost to the point of exhaustion. The publication in 1927 of the material remains of the Viking period from London[2] in a manner appreciative of their equal value with the documentary and place-name evidence for the history of the site was exceptional, and in recent years the investigation by deliberate excavation of towns and settlement sites of the Viking Age, at Norwich,[3] Oxford,[4] Southampton,[5] and Thetford,[6] and far away in Shetland at Jarlshof,[7] has gone some way towards compensating for earlier neglect. The systematic investigation of such sites, however, is only now beginning and so far no comparable work has been undertaken in the lands north of Humber, where from the time of Halfdan's settlement in 876 a thriving Viking province maintained with varying fortune its individuality until the Conquest and beyond. At York, the political centre of the Danelaw, the historical and place-name evidence indicates a thoroughly Scandinavian occupation, but the abundant archaeological material of the period, considering the importance of the site, has never received the attention in detail that it deserves. This material constitutes one of the largest groups of town finds of the Viking Age in the country and although for the most part recovered by chance in modern building operations and ill recorded in consequence has far too long been ignored.

The topography of York is distinctive. The site, although situated in the low-lying Vale of York, occupies a morainic ridge which forms a natural link between the hill country of the Pennines and the Wolds, at the point where the moraine is breached by the river Ouse. In its original state of swamp and forest interspersed with heath—Galtres, extending northwards from York to beyond Northallerton, survived as a

[1] This paper has been published with the aid of a Grant from the Council for British Archaeology.

[2] Wheeler (1927). For list of publications cited by author's name or initial letters of title and date of publication or volume number see end of paper.

[3] *Norfolk Archaeology*, xxx (1952), 287–323.

[4] *D.A.B.* pp. 234–58; *Oxoniensia*, xvii/xviii (1952–3), 77–111.

[5] Interim reports, *Proc. Hants Field Club and Archaeol. Soc.* xvii (1949–51), 65, 125.

[6] Publication forthcoming by Ministry of Works; summary in *Archaeol. J.* cvi (1949), 72–73.

[7] J. R. C. Hamilton, *Excavations at Jarlshof, Shetland* (Ministry of Works Archaeological Reports, No. 1. H.M.S.O. 1956).

royal forest into the middle ages—the Vale must have presented a considerable obstacle to traffic and the comparatively easy going of the York moraine was developed early in prehistoric times as an important east to west trade route. The Romans were equally appreciative of the significance of the crossing and in particular of the site of York itself for here, on a spur between the river Ouse and its tributary river Foss, they established in A.D. 71–74 a legionary fortress to dominate the eastern Pennines, east Yorkshire, and the route to the north, while maintaining direct contact with the sea. In time, the area of initial extra-mural settlement was expanded, partly southwards on the headland between the rivers but principally westwards across the Ouse, where eventually was located the *colonia Eboracensium*[1] which probably occupied the greater part of the area later enclosed by the medieval bank and wall. In the first half of the fifth century York appears as a focal point of early Saxon cremation cemeteries,[2] probably the burials of *foederati* introduced to replace the depleted Roman garrisons,[3] but it was not until the early years of the seventh century that the city emerges as the capital of the kingdom of Northumbria during the period of Edwin's overlordship. As a result of Edwin's marriage to the Christian daughter of a Kentish king, a second Roman mission, that of Paulinus to the Northumbrians, was undertaken in 627 and it is possible that an appreciation of the significance of surviving Roman buildings within the fortress induced Paulinus to build his first church in the area of the *principia*, where the great minster church now stands.

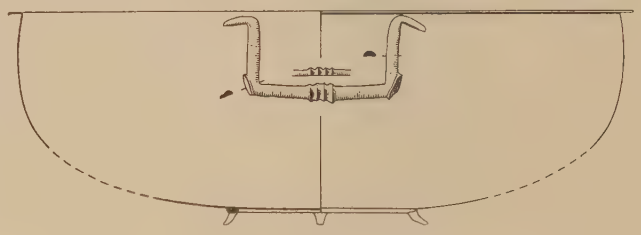


FIG. 1. Bronze bowl ($\frac{1}{4}$).

Material evidence for post-Roman occupation of the site of York, prior to the Viking settlement, is scanty. Three gold *tremisses* from the city constitute a group, conjecturally struck at York during the seventh century,[4] and a few single coins, of Eadberht (with name of his brother, Ecgbert, archbishop of York, 734–66),[5] Alfwald I (778–88),[6] and Æthelred II (841–50)[7] and two, possibly three, hoards of stycas, the largest from St. Leonards Place, deposited *c.* 860–70,[8] have been found. Metal-

[1] See I. A. Richmond, *Archaeol. J.* ciii (1947), 74–82.

[2] *V.C.H. York.* ii, 103–4, pl. ii.

[3] See P. Hunter Blair, *The Origins of Northumbria* (1948), pp. 47–52, reprinted from *Archaeologia Aeliana*, XXV (1947).

[4] C. H. V. Sutherland, *Anglo-Saxon Gold Coinage in the light of the Crondall Hoard* (1948), pp. 50, 94.

[5] One coin found in 1881, 'when making the New Gas Works', and a second in 1888 on the Mount; both localities are outside the area of the medieval walled city.

[6] Moneyer: CVDREVRT (Cuthberht?) found at the east corner of the Roman Fortress, 1928.

[7] Two coins from Clifford Street, moneyers MONNE and FORDRED respectively.

[8] The St. Leonards Place hoard is described, with references, *V.C.H. York.* ii, 102. A total of 400 stycas was found in the grounds of the Exhibition Building, probably a hoard (*Annual Report, Yorks. Philosoph. Soc.* (1879), p. 27) and the record of a donation to the Yorkshire Museum of '30 silver stycas found in the railway excavations' (*ibid.* (1840), p. 26) suggests another hoard.

work includes a bronze 'girdle-hanger' and a small lead cross bearing impressions of a coin of Osberht (849–67) from Clifford Street; in 1829 a bronze bowl with embossed silver print inside and outside the base, considered by Sir Thomas Kendrick to be probably sixth century,[1] was found with two pottery vessels (now lost) in the Castle Yard and a second bronze bowl, with moulded drop-handles and tripod ring-stand (fig. 1), perhaps of the seventh century,[2] was recovered with later material from Clifford Street. Fragments of stone cross-shafts, pre-Viking in character, two found in St. Leonards Place and a third during restoration of the church of St. Mary, Bishophill Junior, have been described by W. G. Collingwood.[3] In recent years, pottery and metal objects, pre-Viking in date, have been excavated by Mr. G. F. Willmot on the site of St. Mary's Abbey but indications of contemporary occupation have been lacking.[4] To this exiguous list may perhaps be added a pottery flask, said to be from York and now in the Yorkshire museum, from the monastery of St. Menas, near Alexandria; two similar flasks have been found in England[5] and all may possibly be regarded as importations of Dark Age, rather than of later, or recent, date.

Before any discussion of the topography of York during Viking times, it is convenient first briefly to describe the development of the site in the middle ages (fig. 2). The Norman defences consisted of an earthen bank and ditch, constructed probably in the twelfth century,[6] and masonry of this date, incorporated in the lower part of at least two of the four gates of the city, at Micklegate and Bootham Bars, indicates that, as for instance at Southampton,[7] these structures were early built in stone. The town enclosure follows in part the perimeter of the Roman fortress and also, presumably, of the *colonia*, including within its area the two motte and bailey castles thrown up by William I in 1068–9; the north-east and north-west defences of the fortress form the core of the Norman bank, which was extended on the west to link up with the river Ouse and on the south-east with the King's Pool (the *stagnum regis* of Domesday) which had been formed by damming the waters of the river Foss. It is probable that the Walmgate area, eastwards of the Foss, was also enclosed by earthwork in the twelfth century since Walmgate Bar, which may retain masonry of this period, is first mentioned *c.* 1150–61.[8] Walling in stone, following the line of the Norman bank, may have begun as early as 1221, when a substantial grant was made towards the fortifications, and grants for murage continued until the end of the fourteenth century,[9] the gates being repaired and strengthened in the early years of Edward III; the stone wall

[1] *Antiquity*, vi (1932), 166.

[2] Cf. ibid., fig. 8 from Kingston, Kent. A bowl of this type was found in grave 31 at the Uncleby (E. R. Yorks) cemetery, *Proc. Soc. Antiq. London*, xxiv, 151. The Clifford Street bowl is in fragmentary condition and has been restored in the drawing.

[3] *Yorks. Archaeol. J.* xx (1909), 154, 170.

[4] Interim report, *Annual Report, Yorks. Philosoph. Soc.* (1952), 22.

[5] Derby, *Derby Arch. Journ.* lxxi (1951), 78–79; Meols, Cheshire, *Journ. Chester & N. Wales Archit. Arch. Hist. Soc.* vol. xliii (1956), 48.

[6] A number of cuttings was made through the bank during the investigation of the underlying Roman defences in 1925–7 (*J. Roman Studies*, xv (1925), 176–94; xviii (1928), 61–99) but a detailed account of the post-Roman structures unfortunately remains unpublished. A little coarse pottery from the make-up of the medieval bank is preserved in the Yorkshire Museum; it is not later than the twelfth century but is too small in quantity for any useful conclusions to be drawn concerning the date of the earthwork.

[7] B. H. St. J. O'Neil, 'Southampton Town Wall' in *Aspects of Archaeology: Essays presented to O. G. S. Crawford* (ed. W. F. Grimes, 1951), pp. 243–57.

[8] *E.Y.C.* i (1914), 251.

[9] T. P. Cooper, *York: the Story of its Walls, Bars and Castles* (1904), pp. 86–89.

enclosing the Walmgate quarter was not begun until *c.* 1345.[1] The two castles were situated opposite each other, one on either side of the river Ouse; on the west bank, the mound, now called the Old Baile, alone remains; on the east bank, the bailey was

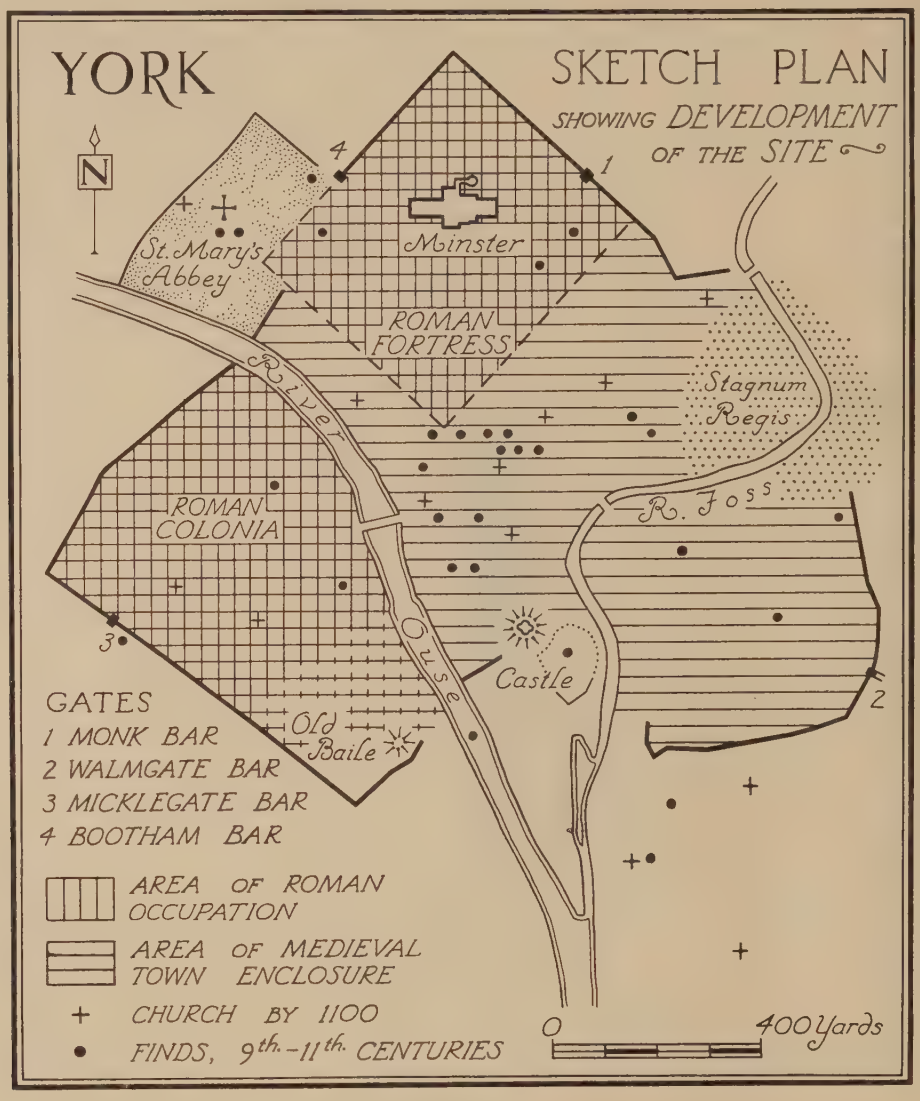


FIG. 2.

in part defined by a stone curtain wall and towers, and the mound was crowned by a stone tower of quatrefoil plan (Clifford's Tower), in the thirteenth century.[2]

The difficulties inherent in the study of any pre-Conquest town site in this country are well known and are no less apparent in the case of York, so that the account which follows can do little more than sketch the available place-name[3] and historical evidence

[1] A. Raine, *Medieval York* (1955), p. 14.

[2] Ministry of Works, *Guide to Cliffords Tower, York Castle* (1954); *Archaeol. J.* cxi (1955), 153–9.

[3] Smith (1937), pp. 275–300; H. Lindkvist, 'A Study on Early Medieval York', *Anglia*, xxxviii, 345 ff.

and introduce a few suggestions based on the distribution of the archaeological material. The thoroughness of the Scandinavian settlement is attested not only by the present name of the city but equally by the names of its streets. Thus although the Anglian name of Eoforwic was retained locally in literature until the twelfth century and even later elsewhere, it was the Scandinavian Jórvik (later Jórk) that was to survive until the present day. The oldest street names of the city, including those which have fallen into disuse or entirely disappeared, can in general be traced back to the twelfth century although with few exceptions—the Shambles is *in macello* in Domesday—not with certainty beyond. Many are compounded with the Scandinavian word *gata* (street) and the 'gate' termination survives in many instances. Moreover the *geil* (lane) element so often found, indicating names of alleys and narrow passages, although not to be identified with the oldest local nomenclature, is said as a west Scandinavian word to emphasize the presence of Norwegian, as well as the original settlers of Danish, origin within the city.

The streets for which twelfth-century or earlier evidence is available have been isolated on the plan (fig. 3), and two main cross-city routes may perhaps be distinguished, intersecting at the church of St. Crux. A west–east thoroughfare is marked by the line Micklegate, Ousegate, (Saint Saviourgate), Layerthorpe and involves the passage of both rivers Ouse and Foss. Ouse Bridge is first mentioned 1189–1200,[1] although the existence of a crossing here can be inferred in the earlier twelfth century; a bridge over the Foss is not attested until the middle of the fourteenth century and it seems that a ford (Leirford) on the same site was earlier in use.[2] The north–south thoroughfare follows the course of Bootham (here aligned on the Roman road leaving the north-west gate of the fortress), Petergate, Fossgate, Walmgate, and crosses the Foss by Foss Bridge, first recorded in 1145–8;[3] Petergate is not referred to until the thirteenth century but the fact that it follows fairly closely the trend of the *via principalis* of the fortress argues strongly for its existence from an early period. Stonegate, at right angles to Petergate, in similar fashion follows the line of the *via praetoria*, which in Roman times must have been extended to bridge the Ouse and bisect the *colonia*, continuing thereafter on the same alignment (approximately the course of the present Blossom Street; thirteenth-century Ploxwangate) in the direction of Tadcaster. Some measure of continuity is perhaps implicit in the incorporation of the road-grid of the Roman fortress into the medieval street-plan, but a similar continuity is not observed in the case of the main artery of the *colonia*, from which the course of Micklegate, aimed at the Ouse Bridge crossing, widely diverges. The abandonment of the Roman crossing for this down-stream site must indicate a considerable change in settlement pattern on the east bank of the Ouse and it is, in fact, precisely in the area south of the Roman fortress—an area which is to be equated with the Marketshire of Domesday[4]—that pre-Conquest finds are largely concentrated. There is thus some reason for regarding the Micklegate–Ousegate alignment to be of similarly early layout and indeed, since the focal point of the main cross-city routes, already manifest by the twelfth century, lies in this area of pre-Conquest settlement, to suggest that these routes throughout are of pre-Conquest origin as well. Until the extent of this

[1] *E Y.C.* i (1914), 176. [2] Smith (1937), p. 293. [3] *E.Y.C.* ii (1915), 218. [4] Smith (1937), p. 293.

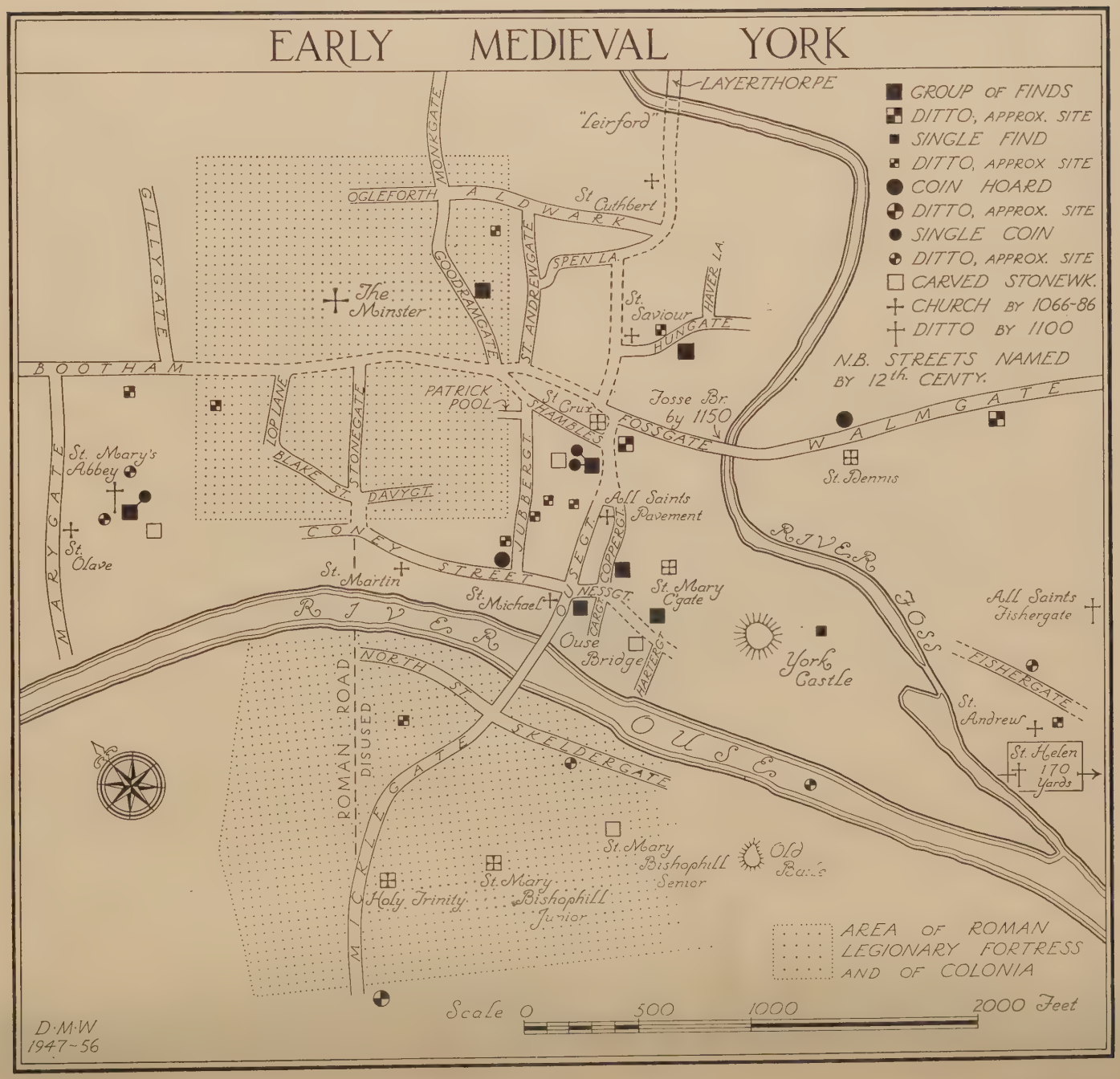

EARLY MEDIEVAL YORK
GROUP OF FINDS
DITTO, APPROX. SITE
SINGLE FIND
DITTO, APPROX SITE
COIN HOARD
DITTO, APPROX. SITE
SINGLE COIN
DITTO, APPROX. SITE
CARVED STONEWK.
CHURCH BY 1066-86
DITTO BY 1100
N.B. STREETS NAMED BY 12th. CENTY.
LAYERTHORPE
"Leirford"
MONKGATE
OGLEFORTH
ALDWARK
St Cuthbert
GILLYGATE
GOODRAMGATE
ST. ANDREWGATE
SPEN LA.
HAVER LA.
HUNGATE
St. Saviour
The Minster
BOOTHAM
PATRICK POOL
St Crux
SHAMBLES
Josse Br. by 1150
FOSSGATE
WALMGATE
St. Dennis
St. Mary's Abbey
St. Olave
MARYGATE
TOPLANE
BLAKE ST.
STONEGATE
DAVYGT.
JUBBERGT.
All Saints Pavement
CONEY STREET
St. Martin
St. Michael
NESSGT.
COPPERGT.
St. Mary C'gate
RIVER FOSS
All Saints Fishergate
RIVER OUSE
CARGT.
Ouse Bridge
HAREGT.
York Castle
FISHERGATE
St. Andrew
NORTH ST.
ROMAN ROAD DISUSED
SKELDERGATE
St. Helen 170 Yards
MICKLEGATE
St. Mary Bishophill Senior
Old Baile
Holy Trinity
St. Mary Bishophill Junior
AREA OF ROMAN LEGIONARY FORTRESS AND OF COLONIA
Scale 0 500 1000 2000 Feet
D·M·W
1947~56

FIG. 3.

YORK
DISTRIBUTION OF 9TH.–11TH. CENTURY FINDS
GROUP OF FINDS
DITTO, APPROX. SITE
SINGLE FIND
DITTO, APPROX. SITE
COIN HOARD
DITTO, APPROX. SITE
SINGLE COIN
DITTO, APPROX. SITE
CARVED STONEWK.
CHURCH BY 1066-86
DITTO, BY 1100
LORD MAYOR'S WALK
ST. MAURICE'S RD.
GILLYGATE
ALDWARK
PEASEHOLME GR
St Cuthbert
The Minster
DEAN GATE
GOODRAMGATE
ST SAVIOURGATE
St Saviour
HUNGATE
BOOTHAM
HIGH PETERGT
LOW PETERGT
St LEONARDS
DUNCOMBE PL
St. Mary's Abbey
St. Olave
MARYGATE
BLAKE ST
DAVYGATE
PARLIAMENT ST
PICCADILLY
St Crux
PAVEMENT
FOSSGATE
WALMGATE
St Dennis
LENDAL
CONEY ST
MARKET
All Saints
COPPERGT
St. Mary
St. Martin
St. Michael
NESSGT
CLIFFORD ST
York Castle
RIVER
All Saints
FISHERGATE
ROUGIER ST
RAILWAY ST
St. Andrew
OUSE
SKELTERGATE
BISHOPHILL JR
St Mary Bishophill Sr
CROMWELL RD
MICKLEGATE
St Mary Bishophill Jn.
Holy Trinity
Baile Hill
D·M·W
1947–56
Scale 0 500 1000 2000 Feet

FIG. 4.

settlement can be more precisely defined, however, no firm archaeological evidence can be offered in support of this hypothesis; the existing distribution of relevant finds may convey an entirely erroneous impression of the density of occupation and a series of excavations over a wide area will be required to provide the necessary check.

Domesday records the existence of seven churches in York. These were Holy Trinity, Micklegate; All Saints, Pavement; St. Crux; St. Cuthbert, Peaseholm Green; St. Martin, Coney Street; St. Mary, Castlegate and St. Andrew, Fishergate, of which the first four occur on the Micklegate–Layerthorpe alignment. Two other churches, similarly placed, St. Saviour and St. Michael, Spurriergate, were gifted to St. Mary's Abbey by William I but are not mentioned in Domesday, where the abbey fee by an oversight was omitted.[1] All Saints, Fishergate, was granted 1091–5 by William II to Whitby Abbey[2] and St. Helen, Fishergate, gifted to the priory of Holy Trinity before 1100 by Ralph de Paynell,[3] who appears to have acquired the church and lands of the priory, which were in secular hands at the time of Domesday. West of the Ouse, St. Mary, Bishophill Junior, retains a western tower of the second half of the eleventh century and work, perhaps of the eleventh century, may be suspected in the neighbouring church of St. Mary, Bishophill Senior.

The only church for which pre-Conquest documentation is available is St. Olave, sited well to the north-west of the Roman fortress in Marygate, which extends from Bootham westwards to the river Ouse; the Anglo-Saxon Chronicle, *sub anno* 1055, records the death of Earl Siward of Northumbria at York and his burial within the church of St. Olave in Galmanho, which he himself had built. It has been suggested that the name Galmanlith, which occurs in the twelfth century, was synonymous with Bouthumlith, the medieval gate erected on the site of the north-west gate of the Roman fortress,[4] and although this identification has been disputed, there exists an obvious connexion between Galmanlith and Galmanho. Marygate, according to Drake, the eighteenth-century historian of York,[5] was anciently known as Earlesburgh and, according to Lindkvist, this name may well embody a tradition that here, far removed from the main area of settlement, was the residence of the pre-Conquest earls of Northumbria.[6] St. Olave church was granted by William I to Alan, earl of Richmond, by whom it was given, with 4 acres of land, to Abbot Stephen of Whitby; the grant was confirmed by William II and the Benedictine abbey church of St. Mary was established by the king in 1089 on a new site immediately to the south-west of the pre-Conquest foundation.

Carved stonework of the later ninth to eleventh centuries[7] has been recovered from several ecclesiastical sites in the city, including part of a cross-head and possibly the fragment of another, and a dedication stone from St. Mary, Castlegate, a finial cross from St. Crux, and part of a cross-shaft from St. Mary, Bishophill Junior. Two

[1] *E.Y.C.* i (1914), 264, 269. [2] *Ibid.* ii (1915), 207.
[3] *Ibid.* vi (1939), 57.
[4] *Ibid.* i (1914), 214; for Bootham Bar, Smith (1937), p. 284.
[5] *Eboracum: or the history and antiquities of the City of York* (London, 1736).
[6] Mr. H. G. Ramm has recently suggested that the name Earlesborough may be identified with a section of a Roman road, parallel to the Bootham alignment, which extended north-west from the *porta praetoria*, skirting the south-west side, of the Roman fortress; *Annual Report, Yorks. Philosoph. Soc.* (1954), 13–17.
[7] W. G. Collingwood in *Yorks. Archaeol. J.* xx (1909), 149–213; xxiii (1914), 260–1.

grave-covers, both ornamented, one with a Jellinge-style animal design, have been found in the graveyard of St. Dennis, Walmgate; a third exists at St. Mary, Bishophill Senior and another, of hog-back type, was found built into the structure of St. Mary, Bishophill Junior. In 1878 part of a cross-shaft, together with wooden coffins and 'other Saxon remains', now lost, was recovered in Parliament Street. Two other pieces of pre-Conquest stone-carving, both architectural fragments, have also been found in the city, one discovered during excavations in front of the Yorkshire Museum in 1913, the other, with Jellinge-style animals, in Clifford Street in 1883; both have panelled ornament, framed by pilasters with capitals.

The existence at York of a pre-Conquest town boundary has yet to be sought by excavation; the presence of such a feature, built *de novo* during the Viking occupation, cannot be inferred from the scanty documentary sources, the purport of which is rendered ambiguous by the known survival of Roman defensive works. On this account, the description by William of Malmesbury[1] of the events which followed the seizure of the Northumbrian kingdom by Athelstan in 927, when the English king took possession of York and destroyed the fortifications which the Danes had built, is difficult to evaluate. Similarly, the Domesday Book (f. 298) records the existence of dwellings belonging to Berenger de Todeni in the ditch of the city, but it remains uncertain whether the ditch in question is other than Roman in construction. Despite the statement of Asser[2] that the walls—and presumably the Roman walls—of York were in decay at the time of the first Viking attack on the city in 866, the excavation of the defences of the Roman legionary fortress in 1925–7 demonstrated the remarkable state of their preservation at the time that they were concealed by the Norman city bank. In a series of cuttings on the north-east and north-west sides of the fortress, the Roman curtain survived to a height of 9–13 feet and at the east corner, indeed, to the level of the original wall-walk, although considerable robbing of the masonry of the outer face had taken place; only at one point had any considerable destruction of the wall occurred and here, where much of the post-Roman mound had at some time been removed, the foundation of the medieval stone curtain, instead of being set merely into the top of the mound, was carried down to rest on the Roman work, suggesting that the destruction of the latter may, in fact, have been carried out early in the middle ages.

Domesday, in the account it gives of the city on the eve of the Conquest, describes it then divided into seven shires, of which one by 1068–9 had been wasted for the erection of the castles. Of the remaining six shires, the archbishop had one containing 189 inhabited dwellings, reduced to 100 at the time of the survey;[3] in the other five shires in Edward the Confessor's time there were 1,418 inhabited dwellings, so that allowing the wasted shire to be of equal extent with that of the archbishop, a total of about 1,800 inhabited buildings for the whole city immediately prior to the Conquest is obtained. It is difficult to assess the total population, as the occupants of a single *mansio* can only be assumed, but the estimate of 7–8,000 persons has been suggested.

However uncertain the topography of the city, there is no doubt of its economic

[1] *Gesta Regum* (ed. W. Stubbs, Roll Series, 1887–9), i. 147.

[2] *De rebus gestis Ælfredi*, c. 27.

[3] For a recent identification of the Archbishop's shire see Prof. A. G. Dickens, *Yorks. Arch. Journ.* xxxviii (1953), 131–47.

importance. An oft-quoted passage in the *Vita Sancti Oswaldi*,[1] written *c.* 1000, describes York as housing a population of 30,000 adults and as a centre for merchants from many quarters, predominantly Danish. The population is clearly an exaggeration, as a comparison with Domesday indicates, but the attraction of the place as a mart is unquestioned, for not only was it easy of approach by water from the sea but it was also the one town of size north of the Humber. There is an account of the presence of Frisian merchants at York in the eighth century and that they continued to frequent the site in later times is suggested by a few finds of Frisian origin from the city. The list of moneyers is a further indication of the economic importance of pre-Conquest York. During the Confessor's reign at least 25, allowing for possible duplication of names, must have been working in the city. This number covers a period of 25 years; for the 88 years from the Conquest until the death of Stephen only 22[2] are recorded, a decrease which must reflect the effects of the devastation of the city by William I.

The material evidence for occupation of York during Viking and early post-Conquest times is largely the result of casual discoveries, and building activity in the city over the last century and a half has revealed, apart from isolated finds, several groups of antiquities of the period which although not to be regarded as closed deposits, yet have every appearance of accumulation during a comparatively restricted time.[3] The bulk of the material comes from that part of the city (fig. 4) situated to the south of the Roman fortress, between the rivers Ouse and Foss, where some Roman settlement has also been observed. Important finds are recorded from the Nessgate–Coppergate area[4] and to the south, where the ground falls away towards the castle, excavation for the present Quaker Meeting House in Clifford Street in 1884 produced a considerable amount of material which fortunately has been preserved as a group.[5] Here the inclusion of combs, pins, tools, and ornaments of bone and beads of amber and glass, in all stages of manufacture, together with unfinished and waste bonework and pieces of unworked amber, suggest that the deposit represents the debris of workshops nearby. The homogeneous nature of the Clifford Street finds, which included a coin of William I, now lost, suggests an eleventh-century date for the deposit, although in view of the conventional dating for a few of the objects found the commencement of accumulation may with greater safety be referred back to the later years of the preceding century. Away from the area centred on the church of All Saints, Pavement, finds in quantity have occurred in Goodramgate, under Messrs. Hunter and Smallpage's shop in 1878, and also in Hungate where excavations, yet unpublished, were recently carried out on a new Post Office site by the Ministry of Works. East of the river Foss, in the Walmgate quarter, 'traces of Scandinavian occupation . . . were found in April, 1840, opposite to St. Margaret's Church, con-

[1] J. Raine, *Historians of the Church of York* (Roll Series), i. 454.

[2] These totals are based on the lists of moneyers in the *Catalogue of English Coins in the British Museum: Anglo-Saxon Series*, ii (1893); *The Norman Kings*, i (1916).

[3] Previous publication of some of the material appears in *V.C.H. York*. ii. 105–8 and *Proc. Soc. Antiq. London*, xxii. 5–9, and more recently in *V.A.* iv. 93–99.

[4] *Annual Report, Yorks. Philosoph. Soc.* (1906), pp. 72–76 with pls. 1–3.

[5] *Yorkshire Museum: Handbook to the Antiquities* (1891), pp. 216–18. The only extraneous material consists of two stycas of Æthelred II; a lead cross with impressions of a coin of Osberht, a bronze bowl probably of seventh-century date (this paper, pp. 61, 80; figs. 1 and 10. 6); and the handle of a thirteenth-century glazed jug.

sisting of bone combs, pins, pieces of querns and many piles and timbers'[1] but material recorded from this locality does not appear to survive.

Sporadic finds of single coins[2] and at least three hoards have occurred in York but in some cases the provenance of the finds is too inexact to permit their inclusion on the distribution maps. A 'large hoard' of St. Peter pennies was discovered in Walmgate, close to St. Dennis' Church, in 1856[3] and several pennies of Æthelred II, unearthed 1882 'in a garden outside Micklegate Bar' may have comprised a hoard.[4] Hoards, probably deposited *c.* 1070, were found in High Ousegate in 1704 and at the junction of Jubbergate and Coney Street in 1845; the former, of William I pennies, was contained in a small oak box, now lost, the latter was said to have numbered about 600 coins, one of which was identified as a penny of Edward the Confessor and the rest examined, about a quarter of the total, as William I. A number of Norman pennies, probably part of a hoard, has been found on the site of the minster. A hoard found on Bishophill in 1882 is reported, in a contemporary account,[5] to have contained 'a large number of silver pennies of Edward the Confessor and William the Conqueror' but in a subsequent account[6] only coins of the Confessor, contained in 'a very remarkable cup with a curiously curving mouth, 4 inches high' (this paper, p. 102) are mentioned; it is possible that two distinct hoards are involved.

It is noteworthy that very few finds of the period under review have come from within the site of the Roman fortress or from the area, west of the Ouse, occupied by the Roman *colonia*. When seeking to draw conclusions from an assemblage of ill recorded material, it is difficult to be sure how far the finds reflect a true distribution pattern and how far this pattern is determined by the arbitrary excavations required by modern building. With this point in mind, the distribution of another group of antiquities, in this case of medieval glazed jugs of the thirteenth to fifteenth centuries of which reasonably complete records are available, may be considered. These vessels are found (to the number of 15) in the area of the Roman fortress, all, since the minster precincts offer little opportunity for excavation, in the south-west half, with a small group (5 in number) without the south corner. Elsewhere these jugs occur very sporadically, 3 found between the fortress and the river Foss, 2 in the walled area west of the Ouse, and 1 from the Walmgate quarter. On the basis of the distribution of these medieval jugs, which were subject to the same conditions of discovery as the earlier material, it would appear that the singular lack of finds of Viking and early medieval date from the site of the fortress may quite reasonably be taken to reflect an absence of any intense occupation therein; here possibly the ecclesiastical authority

[1] A. Raine, *Medieval York* (1955), p. 100.

[2] St. Mary's Abbey (Harthacnut; Edward the Confessor (2)); Pavement (Edgar (2); this paper, p. 102); in Walmgate quarter near the Red Tower (Æthelred II); Fishergate (Cnut); 'under Skeldergate Bridge' (Edward the Confessor); Skeldergate (St. Peter's penny, said to have been found with a large pottery lamp, this paper, p. 102). The coins themselves, or manuscript records of them, are in the Yorkshire Museum; it is not claimed that this coin-list for York is complete.

[3] Detailed lists of the York hoards have appeared whilst this paper was in proof; see J. D. A. Thompson, *Inventory of British Coin Hoards A.D. 600–1500* (Royal Numismatic Soc., 1956). This publication adds a further hoard, perhaps tenth–eleventh century, of which I was not aware, found in 1829 at Layerthorpe Bridge; this hoard does not, therefore, appear on the distribution maps from which, also, the High Ousegate hoard has inadvertently been omitted.

[4] *Yorkshire Museum: Handbook to the Antiquities* (1891), p. 162.

[5] *Annual Report, Yorks. Philosoph. Soc.* (1882), p. 9.

[6] *Yorkshire Museum: Handbook to the Antiquities* (1891), p. 162.

was paramount and the absence of early church sites within the area is perhaps suggestive in this connexion.[1] West of the river Ouse the absence of pre-Conquest material, in view of the small number of medieval finds from the same source, is possibly more apparent than real, but even as late as the end of the twelfth century there was land here still not built over.[2] Despite the uncertain nature of the evidence, however, there still remains a suggestion that, for one reason or another, the area of the city coinciding with the area of intensive Roman occupation was less favoured for settlement than the (apparently) comparatively undeveloped ground between the fortress and the headland between the rivers. The distribution of finds shown on the plans (figs. 3 and 4) can only be taken to indicate the extent of the occupied area by about the middle of the eleventh century at earliest.

When describing the York finds, it has sometimes proved impossible to quote satisfactory parallels from this country and it has been necessary to look to Scandinavia for the required comparative material; and while the connexions thus shown to exist may easily be over-emphasized it is none the less true that from early medieval sites, such as Lund or Sigtuna in Sweden,[3] many close parallels can be drawn. At these town sites, originating in the first quarter of the eleventh century, much of the early strata has been explored by modern excavation, and while there is yet no possibility of dating closely the great bulk of the material finds, often of a very simple character, the tentative dating advanced may with reason be assumed to apply equally to similar material in this country, and particularly to that from York. Naturally, a great deal of the material from York is too indeterminate to be demonstrably of distinct Scandinavian character, and other connexions can be seen. Professor Sir Frank Stenton has suggested[4] that 'the Scandinavian element in the population of York was being recruited throughout the eleventh century by the admission of immigrants from other Scandinavian countries . . . [it] was increasing through the generations which preceded the Conquest and, indeed, continued to increase for some time thereafter'. Certainly, whatever the limitations of the archaeological material, it does appear to confirm the persistence of a virile Scandinavian population in York, certainly up to, and probably well beyond, the Conquest.

Most of the finds described in this paper are preserved in the Yorkshire Museum, York, and I am indebted to the Keeper, and to the Council of the Yorkshire Philosophical Society for permission to publish them. A few objects from York are to be found in other museums and where unpublished have been included here; some published material has been omitted for reasons of economy but reference to it has been made.[5]

[1] This conclusion is hardly affected by a church, just within the south-east limit of the area, an early date for which is perhaps suggested by the surviving dedication to St. Sampson; the church itself is an early nineteenth-century rebuilding.

[2] *E.Y.C.* i. (1914), 176.

[3] For Lund see R. Blomqvist, *Tusentalets Lund* (Lund, 1941) and more recently *Meddelanden från Lunds Universitets Historiska Museum* (1948), p. 150. For Sigtuna see Floderus (1941).

[4] 'York in the Eleventh Century' in *York Minster Historical Tracts, 627–1927* (ed. A. Hamilton Thompson, 1927).

[5] This paper was written, and most of the drawings prepared, in 1947–8, when the writer was a member of the staff of the Yorkshire Museum; a number of recent finds have now been included and references to some publications which have since appeared have been added. I am indebted to the present Keeper, Mr. G. F. Willmot, F.S.A., for the opportunity of publishing the recent discoveries and gratefully acknowledge much other help that he has afforded me, as well as his kind hospitality on a number of occasions.

THE FINDS

WEAPONS AND TOOLS

Weapons of Viking type found in York are surprisingly few in number and consist only of two

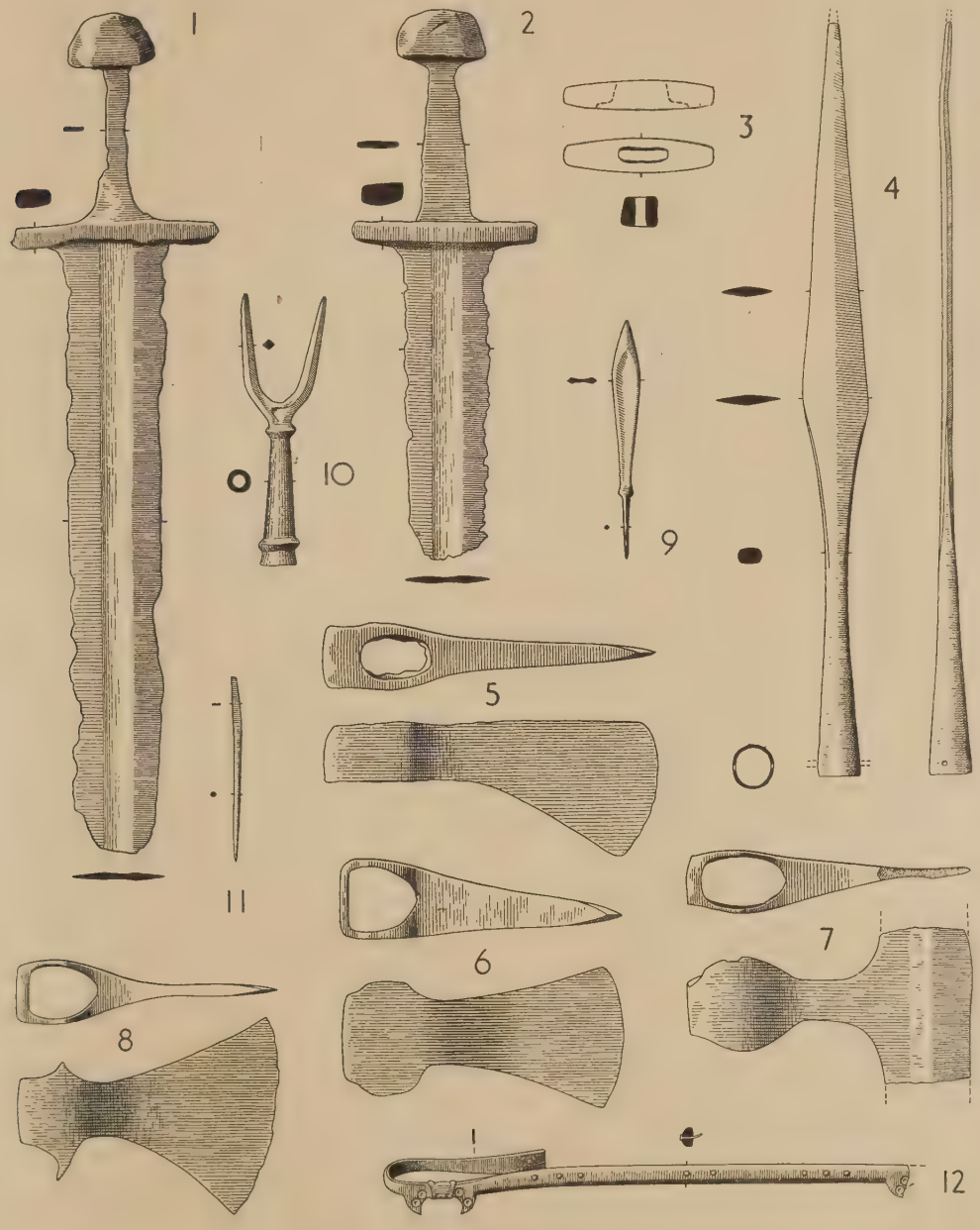


FIG. 5. Weapons and tools ($\frac{1}{4}$); bronze binding, 12 ($\frac{1}{2}$).

swords, a spearhead, and the bronze mounting of another, together with a few axes of which only one is of distinctive Viking shape.

The swords (fig. 5. 1, 2) are of identical form, with semicircular pommel, straight cross-piece

of rectangular section and two-edged, fullered blade. They are of Petersen's type X,[1] which in Norway was current in the tenth century but which may have persisted later in this country. In England the distribution of this type of sword with simple plain pommel seems to be northern[2] but is of limited occurrence. A more elaborate form of pommel, divided into sections by two vertical or oblique grooves meeting a horizontal groove which distinguishes the top of the pommel bar, occurs in the south,[3] while a pommel in which the horizontal groove only appears is found on swords from the Thames,[4] Newark, Notts.,[5] and near Stanground, Cambs.[6]

A sword-guard of deer-horn[7] (fig. 5. 3), with convex sides and central slot shouldered to accommodate the iron blade, was found at Clifford Street.

With the swords may be described a bronze scabbard-chape with open-work ornament in the Anglo-Scandinavian Jellinge-style, which was found in Coppergate in a deposit containing material[8] substantially of tenth-century date. This object (fig. 6) is clearly an import from the Scandinavian north where sword-chapes, variously ornamented, are well known in late Viking times.[9] A bird-motif in some form or another is represented[10] on chapes from all the northern countries, but the Jellinge ribbon-style animal of the York example is less frequent. Sword-chapes are most frequently found in Sweden, including Gotland, and in the Viking colonies east of the Baltic, suggesting that this embellishment of the scabbard was essentially an eastern Scandinavian feature.

FIG. 6. Bronze sword chape (½).

Apart from a bronze socket for an iron spearhead,[11] provided with lateral projections or wings with zoomorphic terminals, bearing engraved ornament in Ringerike-style, the only spearhead known to have been found in York is now in the Skipton (Yorks.) Museum (fig. 5. 4). It is of the graceful form, Petersen's type K, with long, slender blade and socket, presumably of the eleventh century.

The axes include two of the form known as the woodman's axe (fig. 5. 5, 6), a simple type common from Roman times onwards, both found in Coppergate, the latter from the Group A deposit. The carpenter's T-shaped axe (fig. 5. 7 from Parliament Street; it lacks the arms of the blade) is not recognized as a Viking type in Scandinavia but is found in England[12] and persists well into the middle ages.[13] The only other axe selected for illustration (fig. 5. 8), from Coppergate, bears features, notably the well marked projections above and below the socket, sufficiently distinctive of Viking workmanship and in form approximates to Wheeler's type V, dated ninth to tenth century.[14]

A couple of arrowheads of distinctive Viking type,[15] in which the blade is slightly dished on

[1] J. Petersen, *De Norske Vikingesverd* (Kristiania, 1919), pp. 158–67.

[2] e.g. Nottingham, *V.A.* iv. 15, fig. 3; single examples occur in Ireland (Nat. Mus. Dublin, without provenance) and probably in Man (*Antiq. J.* x (1930), 130, fig. 2).

[3] For list see Wheeler (1927), p. 36.

[4] *Proc. Soc. Antiq. London*, xvi. 392.

[5] *V.A.* iv. 71, fig. 43.

[6] *V.C.H. Cambs. and Isle of Ely*, i. 326, pl. xia.

[7] Not of whale-bone, as *V.A.* iv. 96. The new identification is by Dr. F. C. Fraser of the British Museum (Nat. Hist.).

[8] Including the iron horse bit, fig. 8. 1, the bone-mounted wooden box, pl. xvii, and other objects. Finds from this deposit are referred to as Coppergate Group A but there is no evidence to show that these objects were in direct association.

[9] For a recent survey of these chapes see S. Grieg, 'Gjermundbufunnet', *Norske Oldfunn*, viii (Oslo, 1947), 31. See also H. Shetelig, *Viking*, i (1937), 218, pl. xxviii. 1.

[10] M. Strömberg, 'Schwertortbänder mit Vogelmotiven aus Vikingerzeit', *Meddelanden från Lunds Universitets Historiska Museum* (1951), p. 221.

[11] *Archaeol. J.* vi (1849), 402. This interesting object has recently been rescued from obscurity in the Pitt-Rivers Museum, Farnham, by Sir Thomas Kendrick and figured by him in his *Late Saxon and Viking Art* (1949), pl. lxix. 1.

[12] Wheeler (1927), p. 24.

[13] *Med eval Catalogue* (London Museum Catalogues: No. 7, 1940), p. 58.

[14] Wheeler (1927), p. 25.

[15] Rygh (1885), fig. 539.

both faces and its junction with the tang marked by a pronounced swelling, are recorded from Goodramgate (fig. 5. 9) and from Clifford Street.

The scramasax knife, with characteristic angle half-way down the back of the blade, is not well represented at York (fig. 7. 1, 2, the former from Goodramgate). A commoner type seemingly

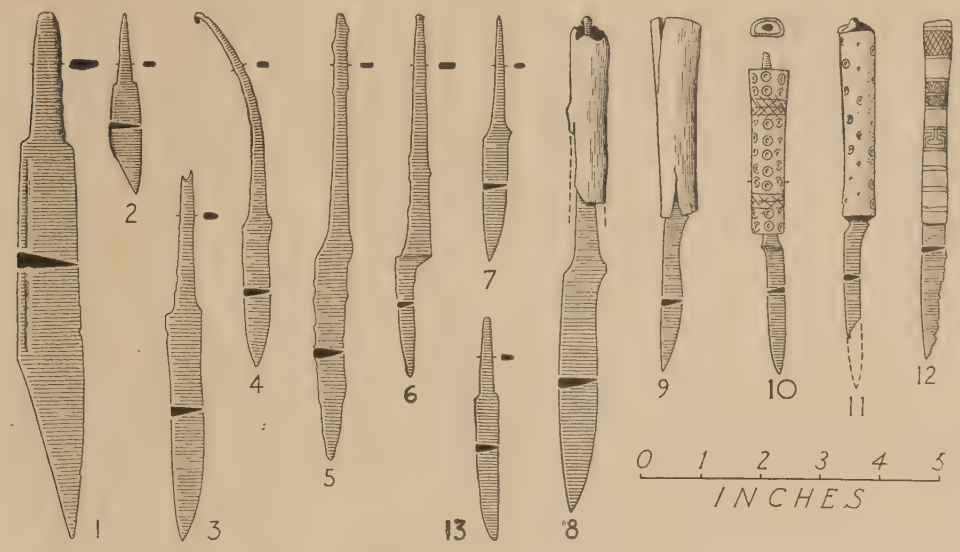


Fig. 7. Iron knives ($\frac{1}{3}$).

unrelated to the knife forms current in the middle ages may be included here (fig. 7. 4–7). It is of slighter proportions, the cutting edge an elongated S-curve in profile and the junction of blade and tang marked by pronounced drooping shoulders. The blade is wedge-shaped in section and the tang either equals or exceeds the blade in length; the diminutive size of the blade, e.g. of no. 6, may be due to continual resharpening. In a few cases handles of wood (fig. 7. 8, 9) and bone (fig. 7. 10, 11, with incised ring-and-dot ornament) are preserved. This form of knife is recognized in Scandinavia during the Viking Age[1] and occurs at the Saxon town of Thetford, in Norfolk,[2] the offsetting of blade from tang and the greater length of the tang in proportion to the blade being consistent features. A single example of this form, too damaged to illustrate, is known from Clifford Street. With it were found two knives (fig. 7. 3, 13) without definable features, together with another, with imperfect blade, mounted in a bone handle, slightly waisted at the middle, bearing incised ornament of cross-hatching, chevrons, and key-pattern (fig. 7. 12). Like the bulk of the material from Clifford Street, these knives are probably all of the eleventh century.[3]

Two miscellaneous items of iron are illustrated. The first (fig. 5. 10) from the Group A deposit in Coppergate and presumably of tenth- or eleventh-century date, is a two-pronged implement with socket embellished with a pair of bronze-coated mouldings, similar to objects known from Viking sites elsewhere.[4] The second is a small awl (fig. 5. 11) of circular section with flattened head, from Clifford Street.

[1] Arbman (1943), Taf. 182; Nørlund (1948), Tav. xxviii.

[2] I am indebted to Mr. G. C. Dunning for information of the finds from the excavations conducted by the Ancient Monuments Inspectorate of the Ministry of Works.

[3] For ornamented leather knife-sheaths from York see *V.C.H. York*. ii. 108, figs. 27, 28.

[4] e.g. Birka, Arbman (1943), Taf. 185. 10; Hedeby, Jankuhn (1943), 128, Abb. 62; Dorestad, *Oudheidkundige Mededeelingen*, N.R. xi (1930), 77, Afb. 60. 45.

HORSE FURNITURE

A complete iron snaffle-bit was found in the Coppergate Group A deposit (fig. 8. 1). The cheek-pieces are in the form of an inverted Y, made in two separate parts; the upper portion, which is

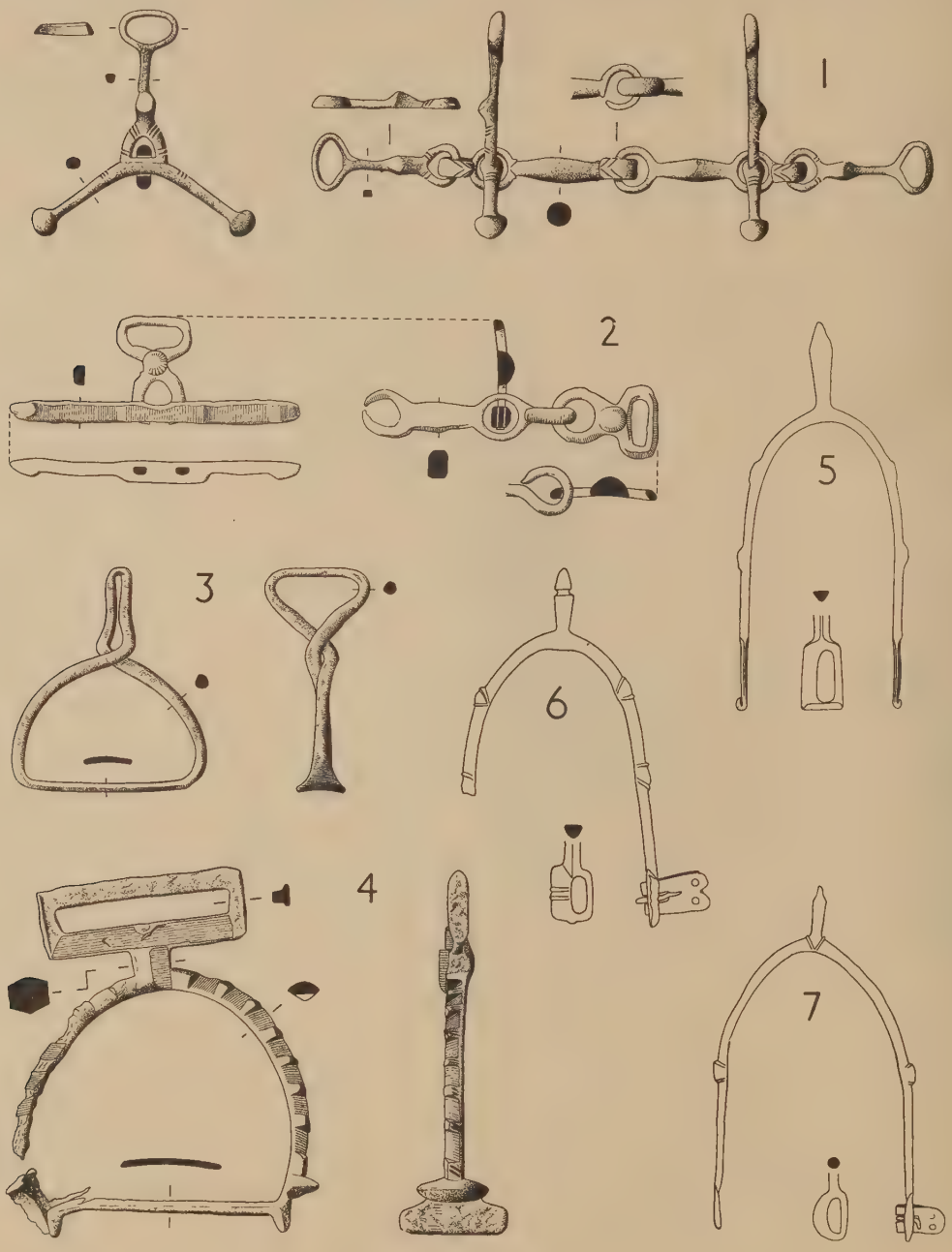


FIG. 8. Horse furniture (⅓).

provided at the top with an oval loop for attachment of harness, bifurcates at the bottom into two short, curved arms, slotted into the flat upper surface at the junction of the lower, down-turned

limbs. These lower limbs terminate in pronounced bosses and the stem of the upper portion is swollen, appearing rather angular in profile, above the D-shaped opening. The side links are looped at both ends and expand into angular bosses towards the middle; they are attached, by means of a collar, to the end loops of the central links, which pass through the D-shaped opening of the cheek-pieces. A simple engraved decoration, probably inlaid originally, occurs on both cheek-pieces and links.

Fragments of bits of this type occur elsewhere in England; from London are two complete sets of links[1] and in the Winchester City Museum is the upper portion of a cheek-piece, presumably of local provenance, which bears engraved ornament, similar to that on the York example but inlaid probably with white-metal, on the curved arms (fig. 9). At Winchester, also, a derivative form of this type of bit occurs[2] (fig. 8. 2), in which the stem of the upper portion of the cheek-piece has disappeared; the loop at the top and the curved arms assume a figure-of-eight form, the centre emphasized by a pronounced boss, the arms being slotted into a simple straight bar with swollen terminals. A similar constriction occurs on the side links. Fragments of bits of derivative form have also been found at Thetford (M.O.W. collection; unpublished).[3]

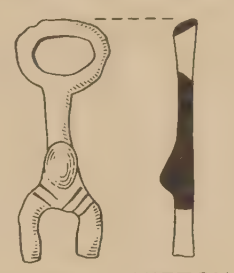


FIG. 9. Part of iron cheek-piece of snaffle-bit from Winchester, Hants ($\frac{1}{2}$).

A small group of horse-bits, identical with the York example, occurs in southern Norway, in the provinces of Hedmark and Vestfold, where the associated finds indicate a ninth- to tenth-century date for the type.[4] It is uncertain whether this class of bit is of Scandinavian or English origin; certainly, the limited distribution of the Norwegian examples argues for a local source in that country. The presence of bosses on these bits is probably to be explained, as a similar feature on stirrups has been interpreted,[5] as the retention for purely decorative reasons of the swelling of a twisted metal rod, as seen on the links of a number of bits in Scandinavia. It is a simple technique and the exploitation of the boss feature decoratively is not necessarily to be attributed to Scandinavian smiths alone. In this connexion, mention may be made of another class of bit in which the cheek-pieces are usually of bronze and unlike the type under discussion save for the presence of boss ornament on cheek-pieces and links; such bits occur in Scandinavia, notably in Sweden, during the eleventh century and are regarded as English in origin.[6] The whole question of the source of certain types of horse-furniture in Scandinavia requires working out in detail and until this has been done—one obstacle being the lack of comparative material in this country—nothing final can be said concerning the origin of bits of the York–south Norwegian type.

Two stirrups occur at York, the first of simple Viking form (fig. 8. 3) made from an iron bar, twisted to form a loop for the stirrup-leather and hammered flat to provide a foot-rest.[7] The

[1] Wheeler (1927), p. 42, fig. 20.

[2] In Winchester City Museum. I am indebted to the curator, Mr. Frank Cottrill, for permission to draw and illustrate these bits.

[3] A bit, now lost, but possibly of the same general class described above, was found with an intrusive interment on top of Silbury Hill, Wilts., in 1723, see Stukeley, *Abury*, pp. 41–42, Tab. XXXVI.

[4] In Universitetets Oldsaksamling, Oslo. For convenience, a list of these Norwegian examples is included here; Mrs. Charlotte Blindheim has kindly provided details of the associated finds:

HAMMERSTAD, STANGE, Hedmark (museum no. C. 4989). From a richly furnished grave, including weapons and horse gear of ninth-century type.

BRYNI, ROMEDAL, Hedmark (C. 5389).

V. ENGELHAUG, LÖITEN, Hedmark (C. 10717). Richly furnished grave, including numerous tools, arrow-heads, and fragmentary sword. Date uncertain.

ÖVRE KONGSTEIG, SKJEE, Vestfold (C. 6023). Found with axe of tenth-century type.

NORDHEIM, HEDRUM, Vestfold (C. 19463). Found with axe and arrow-heads probably of tenth-century type.

These bits have now been discussed by J. Petersen, *Vikingetidens redskaper* (Oslo, 1951), 21–22, fig. 19.

[5] Wheeler (1927), p. 38.

[6] H. Arbman, *Upplands Fornminnesförenings Tidskrift*, xlv. 3. For a readily available illustration of a bit of this type see Rygh (1885), fig. 568.

[7] Cf. Arbman (1943), Taf. 34. *2a*, *2b*; Rygh (1885), fig. 588.

second example (fig. 8. 4) is a more elaborate object for which it is difficult to suggest date or origin, appearing to elude classification within the recognized series of English Viking Age stirrups and to have few points of resemblance with the forms in common use in Scandinavia. The bow is D-shaped, connected by a short neck of hexagonal section with the wide rectangular loop; the foot-rest is broad and flat, downturned and expanded at the ends, with flattened, bolster-shaped bosses above at the junction with the arms of the bow. The face of the bow is cut away at regular intervals to provide a flat surface to which thin bronze plate, possibly gilt, has been introduced, between which the original surface appears as transverse ribs bearing simple engraved lines. Bronze plating is also preserved on the lower part of the head-loop and on one side of the neck, consisting of thin sheets of metal cut to the appropriate shape and attached to the iron apparently by some form of cement rather than by hammering;[1] the expanded ends of the foot-rest, below the side bosses, were similarly bronze plated, although this has now largely worn away.

A stirrup, with the same D-shaped bow and wide loop of the York example, was found in grave 3, dated *c.* 1000, at the Viking cemetery at Tuna, in Sweden;[2] this object, together with a somewhat similar stirrup with which it was associated, is in marked contrast with the tall, narrow form from an earlier grave (grave 12) which is, in fact, the regular form of Viking stirrup in Scandinavia. In England, the York stirrup may best be compared with a bronze example from Mottisfont, Hampshire,[3] which, however, instead of the normal rectangular head-loop carries a plate with zoomorphic ornament reminiscent of the Urnes-style. Several bronze stirrups of this type are known in Denmark[4] and, although all unassociated finds, seem to belong to the eleventh century. It might be suggested, therefore, that the York stirrup is no earlier than the eleventh century but whether of English or Scandinavian workmanship is uncertain.

There are three iron prick-spurs, from unrecorded sites in York, which may tentatively be attributed to the Viking Age (fig. 8. 5–7); they bear ornamental bosses on the arms, recalling the bosses on Viking stirrups and on horse bits of the type described above. These spurs are characterized by long straight arms with point in the same plane as the body and rectangular or D-shaped terminals slotted for a strap, which was attached by means of a simple buckle. This type of spur is apparently not recognized in Scandinavia; despite the absence of further examples in this country, it may prove to be a peculiarly English late Viking form.[5]

ORNAMENTAL METALWORK

A number of small bronze ornaments, mostly tags and pins, of recognized late Saxon type occur at York, found without associations at unrecorded sites in the city. The tags (fig. 10. 1–5) are all of similar form, the butt end split to receive a strap or silk ribbon which was secured in position by a pair of rivets. The tip is treated as a stylized animal-mask, usually with recognizable ears and a tri-lobed leaf droops from between the rivet-holes;[6] the flat field, in one instance with a beaded border, usually bears zoomorphic ornament of single or coupled beasts, in two cases, nos. 2–3, speckled with small stabs.[7] Metal tags of this type occur in late Saxon hoards at Trewhiddle[8] and Talnotrie, Kirkcudbrightshire,[9] deposited *c.* 875–900, and at Cuerdale,[10]

[1] For this technique see *Acta Archaeologica*, vii (1936), 162.

[2] T. J. Arne, *Das Bootgräberfeld von Tuna in Alsike* (Stockholm, 1934), Taf. vi. 8. See also R. Blomqvist, 'Stigbyglar' in *Kulturen Museum Årsbok* (1948), 100, Bild 29.

[3] *Archaeologia*, l (1887), 532 with fig.

[4] e.g. S. Muller, *Ordning af Danmarks Oldsager: II Jernalderen*, no. 588. I am indebted to Dr. O. Klindt-Jensen, of the Nationalmuseet, Copenhagen, for providing me with details of the unpublished examples.

[5] A somewhat similar example, however, is published by P. C. J. A. Boeles, *Friesland tot de Elfde Eeuw* (1951), 468, fig. 85.

[6] These motifs occur on much late Saxon ornamental metalwork, apart from the tags. For the animal-mask see, e.g. the Trewhiddle bands (*Brit. Museum Anglo-Saxon Guide*, 100, fig. 120) and the Strickland brooch (R. L. S. Bruce-Mitford, 'Late Saxon Disc-Brooches', *D.A.B.* p. 190, pl. xxvi); for the lobed leaf see, e.g. Bruce-Mitford, *ibid.* pls. xxi A, xxiii, xxx D (sword mounts), xxvii A, B (Beeston Tor disc-brooches).

[7] Bruce-Mitford, *D.A.B.* p. 192; *Antiq. J.* xxxvi (1956), 35.

[8] *Brit. Museum Anglo-Saxon Guide*, p. 99.

[9] *Proc. Soc. Antiq. Scotland*, xlvii (1912–13), 12, fig. 3.

[10] *Brit. Museum Anglo-Saxon Guide*, p. 107, fig. 132.

deposited *c.* 905; apart from isolated finds, several examples have been recovered from the Saxon monastery at Whitby, Yorks.[1] It has been suggested, in view of the occurrence of ecclesiastical loot in the hoards and of the presence of these tags on a monastic site, that they formed

FIG. 10. Ornamental metalwork ($\frac{1}{1}$).

the ends of silk ribbons, used as book-markers, rather than part of the costume, such as the end of a leather strap; their occurrence at the ecclesiastical centre of York is quite in agreement with this interpretation.

[1] *Archaeologia*, lxxxix (1943), 55, fig. 11.

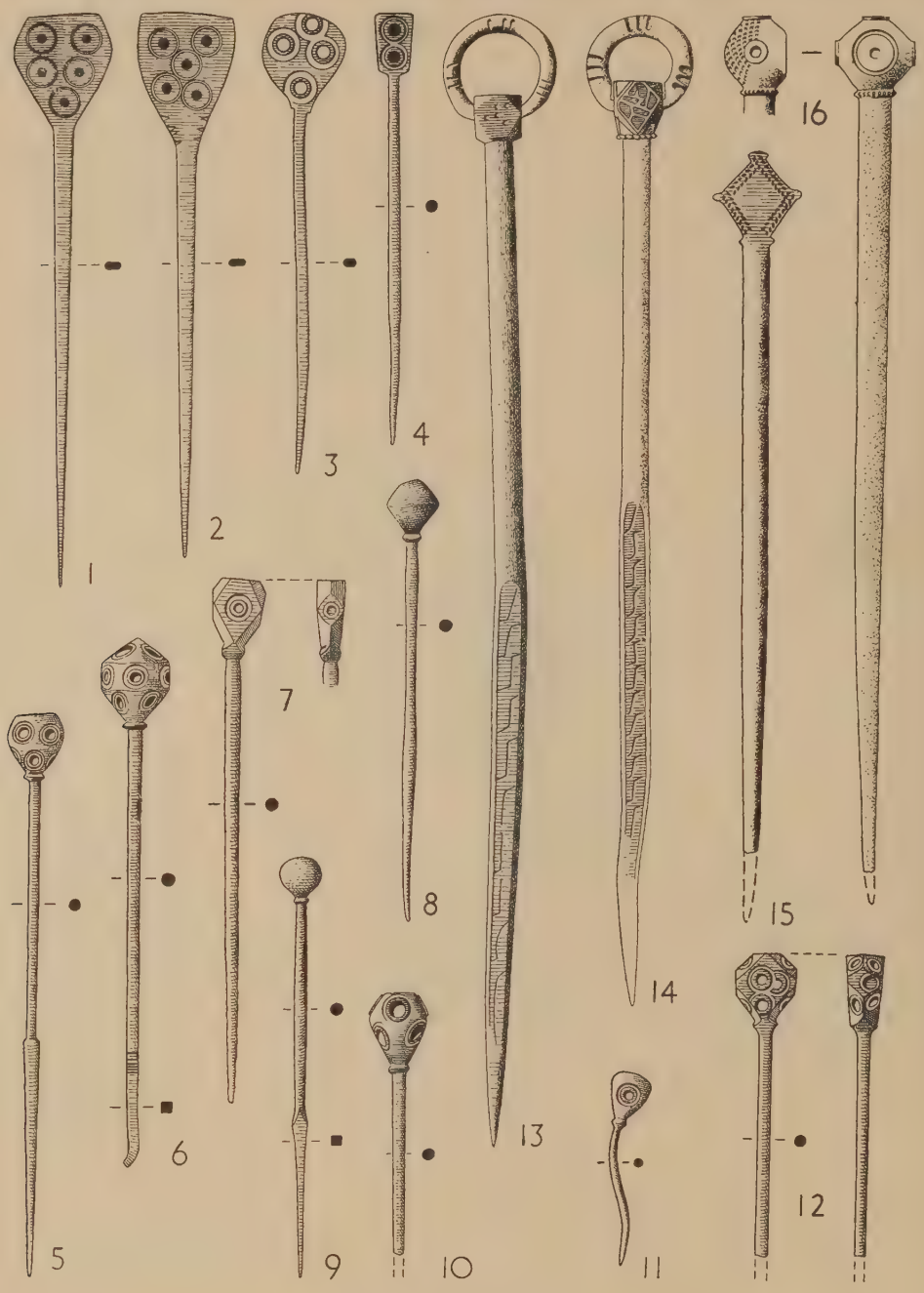


Fig. 11. Bronze pins (1/1).

The pins, also, are similar to a series from Whitby,[1] with flat (fig. 11. 1–4), globular (5, 6, 8–11), or faceted (7, 12) head which in most cases is decorated with carefully executed ring-and-dot ornament. Two pins (5, 10) have a single ring-and-dot on the flattened top of the head and

[1] *Ibid.* p. 63, figs. 13, 14. For a number of late Saxon pins of similar type from South Ferriby, Lincs., see *Hull Museum Publications*, no. 65, pl. vii.

in three instances (1, 2, 4) the central dot is perforated through the full thickness of the metal. Examples with head of globular or faceted form have a slight moulding or collar at the base of this projection and the stem is sometimes (5, 9) shouldered towards the point;[1] in one instance (6) the stem becomes square in section at the extremity and is there bent slightly outwards.

A number of bronze pins of types current in Ireland during the Early Christian period have been found in York. Three are of ring-headed form;[2] the longest (fig. 11. 13 from site of Coach and Horses Inn, Nessgate) has a confused engraved design on one side of the faceted head and a series of circular depressions on the other, while the lower part of the stem is flattened and ornamented with an incised step-pattern on both faces. The second (fig. 11. 14) is similar, the head, which is separated from the stem by a cable-moulded collar, bearing an incoherent engraved design on both faces; the third pin (from Clifford Street, much corroded and not illustrated) has the head ornamented by circular depressions. Three pins with lozenge-shaped heads[3] are preserved, one (fig. 11. 15) having projections at each extremity of the head, which is outlined by a cabled ornament formed by a double row of opposed, oblique incisions. There is also a single pin (fig. 11. 16) in which the head is ornamented with disc-like projections at top and sides; one face is flattened, bearing a central depression set within a deeply engraved circle, the back of the head is 'brambled' and the head is separated from the stem by a notched collar.[4] A close connexion between the Viking Kingdoms of Dublin and York is well attested historically[5] and the presence of Irish-type pins at York may reasonably be regarded as evidence for intercourse between these Viking cities.

Three circular brooches, attached by means of a hinged pin and catchplate, may be related to the period under review. The largest (fig. 10. 8 from Parliament Street) is of cast pewter, ornamented with a rosette pattern radiating from a central boss and incorporating similar bosses in the design. This brooch has been mentioned in a discussion of the adoption of the rosette motif from native Anglo-Saxon work[6] and the design is clearly related to that on a silver brooch from Beeston Tor, Staffs., associated with a coin hoard of *c.* 871[7] or that on an engraved silver disc-brooch found at Sutton, Isle of Ely, associated with coins of William I.[8] The second brooch (fig. 10. 7) of pewter is of poorer quality and bears a rough cruciform design of lines and pellets.[9] The third brooch (fig. 10. 9) is of silver, ornamented with an animal in the Anglo-Scandinavian Jellinge-style of the tenth century, set within a double border of pellets and enclosed by a cable moulding. Whilst this object bears the clear imprint of a Scandinavian art-style, the beaded border is perhaps a borrowing from circular brooches of the late Saxon period in England.

The object of lead (fig. 10. 10) is apparently unique in this country. It has a cruciform body and bears a simple interlace in false-relief, with a fan-shaped projection, showing crude zoomorphic

[1] This shoulder occurs on a bronze pin from the late Anglo-Saxon cemetery at Shudy Camps, Cambs., *Cambs. Antiq. Soc.* (*Quarto Publications*), N.S. no. 5, fig. 4, A. 1. The incidence of hipped pins on Dark Age sites in Great Britain has recently been discussed by Mr. R. B. K. Stevenson, *Proc. Prehist. Soc.* xxi (1955), 285.

[2] *Archaeologia*, lxxii. 85, pl. xiv, fig. 2. Pins of ring-headed type occur in Ireland, e.g. at Ballinderry Crannogs no. 1 (tenth century; *Proc. Royal Irish Academy*, xliii (1936), C.5) and no. 2 (*c.* eighth century; *ibid.* xlvii (1942), C. 1) and, not closely dated, at Lagore Crannog, (late seventh to tenth centuries; *ibid.* liii (1950), C. 1).

[3] *Archaeologia*, lxxii. 85, pl. xiii, fig. 4. 9–11.

[4] *Ibid.* 85, pl. xiii, fig. 4. 6–8.

[5] [Sir] Thomas Kendrick, *A History of the Vikings* (1930), p. 250. Numismatic evidence for traffic in the early tenth century is summarized in *Acta Archaeologica*, xxvi (1955), 171.

[6] E. T. Leeds, *Early Anglo-Saxon Art and Archaeology* (1936), p. 11.

[7] *Antiq. J.* v (1925), 136, fig. 1.

[8] *D.A.B.* pp. 193–8.

[9] For a very similar pewter brooch from Nottingham see *Trans. Thoroton Soc.* (Excavation Section), 1938, pl. xi. Another pewter brooch of this same general type, from York, is now in the British Museum, *Proc. Soc. Antiq. London*, xxii. 66, pl. opp. p. 63, 3. A silver brooch with a central design derived from a Roman coin of Valentinian enclosed within a border of concentric lines and pellets (*V.C.H. York.* ii; frontisp. 14), now in the Yorkshire Museum, is without provenance but no doubt was found in the city. It is of the same type as a more imposing specimen, with centre apparently copied from a coin of Edgar (959–75), from Canterbury, *Proc. Soc. Antiq. London*, xix. 210.

indications at the top; the reverse is flat and plain. This object is clearly copied from a type of cruciform pendant with stylized bird-head terminal which occurs, usually of silver and more rarely of gold, in several Viking and early medieval hoards, chiefly in Denmark and Gotland but also, either in hoards or singly, in Sweden, Poland, north Germany, Russia, and Iceland. This class of pendant has been discussed in connexion with the well-known gold hoard from Hiddensee, Brandenburg,[1] and more recently in a survey of the Danish hoards;[2] the associated coin evidence indicates a wide range of date, the earliest example occurring in a hoard deposited *c.* 960, the latest in a hoard of *c.* 1090. Examples, other than in gold or silver, seem to be lacking but a bronze object, somewhat similar to the York piece and like it not prepared for suspension, is known from the Trelleborg, Denmark.[3]

There are a few small metal objects from York which may be mentioned, including a lead cross (fig. 10. 6 from Clifford Street) perforated for suspension and impressed on one face with the obverse and reverse of a styca of Osberht of Northumbria (847–67). The small bronze mount (fig. 10. 11), ornamented by a simple interlace, drawn out and bent over to form a hook at the bottom and having two (originally three) perforations for attachment at the upper edge, is a type recognized on late Saxon sites,[4] and the fragment of cast bronze interlace with finely beaded border (fig. 10. 13) is likewise late Saxon in character. A bronze roundel (fig. 10. 12), the upper, concave surface of which bears an engraved design evidently based on a Viking copy of a coin of Æthelred II,[5] is apparently intended for a weight, probably equivalent to an ounce. Two objects are of recognizable Viking workmanship, a gold ring (fig. 10. 14 from Hungate) comprising thin twisted wires drawn together and beaten flat at the extremities and part of an ornamental bronze binding (fig. 5. 12 from the Coppergate Group A deposit). The binding when complete was about 6·7 in. in length and plano-convex in section save at the slightly splaying ends, which were bent round and flattened; it was secured by small iron rivets along the length in groups of two or three, the recurved portion being attached by a single rivet, the hole for which remains. At each end were animal-masks, one of which remains, with ears and dimple-eyes, below which on either side are two claw-like projections ornamented with ring and dot. A small bronze mounting, possibly from York, has been described by Mr. J. D. Cowan.[6]

BONE AND WOOD

By far the greatest amount of material of the period from York is of bone and the wet situation of the site has also contributed to the preservation of a number of wooden objects. The utilization of such organic material is an especially common feature of Dark Age settlement sites and accordingly the city finds are presented in some detail.

Bone Pins, Bodkins, and Styli

Fig. 12. 1. Copy in bone of a ring-headed bronze pin (cf. fig. 11. 13, 14). On one face the stem is flattened towards the point and bears an incised step-pattern. The barrel-shaped head, deeply hollowed at the sides and showing bronze staining, must have held the split ends of a bronze ring. From Clifford Street.

A bone pin, with bronze head-ring, from York is preserved in the Castle Museum, Norwich (Inv. No. 423/76.94).

[1] P. Paulsen, 'Der Goldschatz von Hiddensee', *Mannus* (1934), pp. 82–115.

[2] R. Skovmand, 'De danske Skattefund', *Aarbøger for Nordisk Oldkyndighed og Historie* (1942); p. 53 for list of known examples with date of deposit of hoards in which contained. The Tolstrup hoard, containing four complete or fragmentary examples, is illustrated, fig. 9. For further details of the Gotland pendants see M. Stenberger, *Die Schatzfunde Gotlands der Wikingerzeit*, ii (Lund, 1947).

[3] Nørlund (1948), 129, Tav. xxv. 5.

[4] e.g. T. C. Lethbridge, 'A Cemetery at Shudy Camps, Cambs.', in *Cambs. Antiq. Soc.* (*Quarto Publications*), N.S., no. 5, fig. 1. E. 2; Whitby, *Archaeologia*, lxxxix (1943), 60, fig. 12. 10; also (unpublished) Thetford and Southampton. A similar mount in silver, from Birka, Arbman (1943), Taf. 99. 4, is recognized as English work.

[5] This identification has been suggested by Mr. P. V. Hill, Dept. of Coins and Medals, British Museum.

[6] *Saga Book of the Viking Society*, xi (1935), 1–4.

Fig. 12. 2. This unusual object is of rectangular section and bevelled at one end to form a point, now broken off; it is probably a bodkin or pricker. It is pierced at the extremity and the

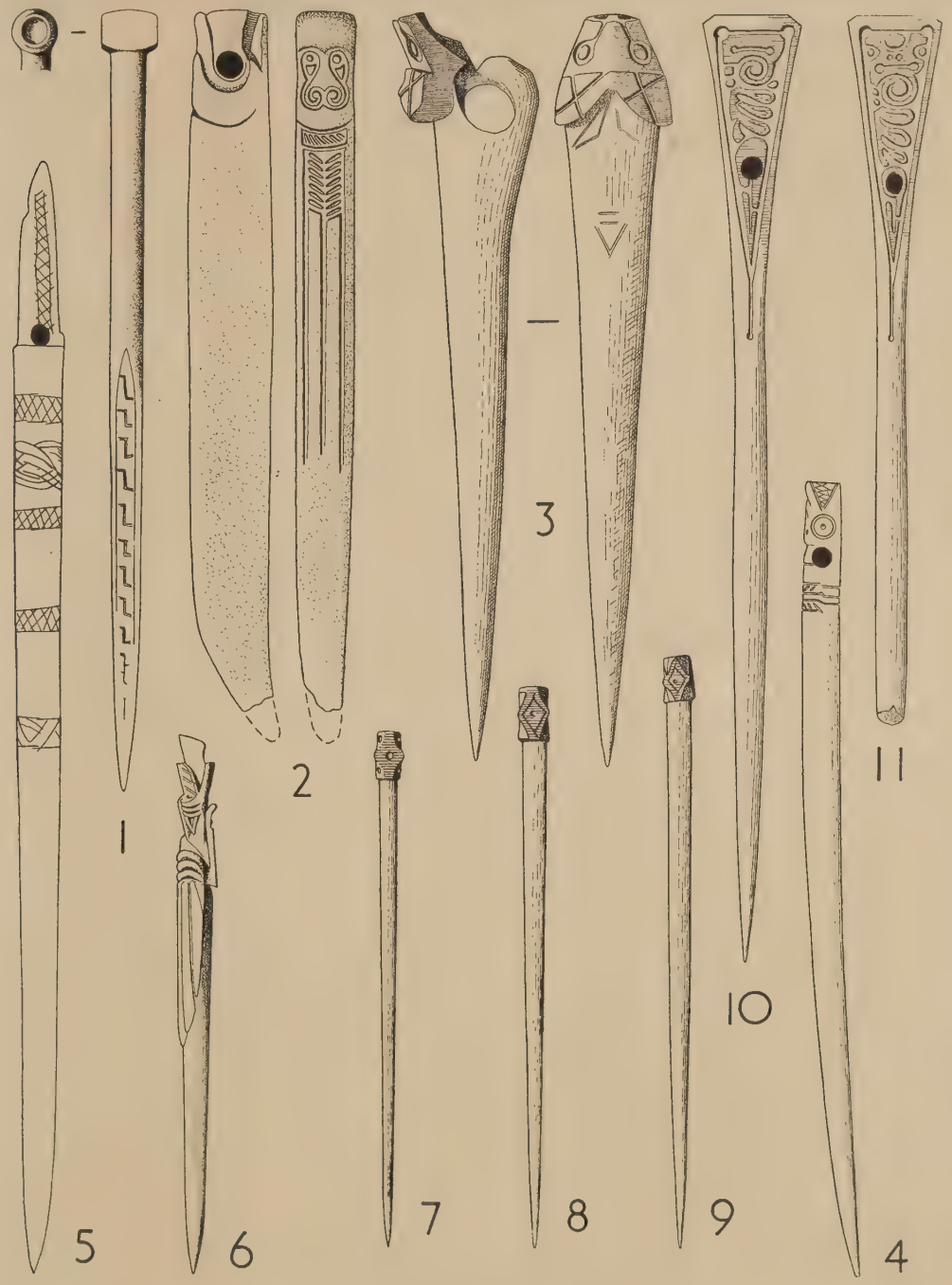


FIG. 12. Bone pins and bodkins ($\frac{1}{1}$).

enclosing moulding, cut on one face only, was evidently added to enhance the likeness of a beast-head. The back is enriched with a carefully executed incised design. Above the perfora-

tion are two confronted scrolls, with pear-shaped terminals which enclose a pair of pellets. Along the length, separated from the scrolls by an obliquely incised panel, are three parallel grooves; the central groove stops short of the transverse panel and springing, feather-like, from it are two rows of opposed, oblique strokes. Found under the Coach and Horses Inn, Nessgate.

Fig. 12. 3. Large pricker. The natural projection of the bone has been adapted as a field for carving and trimmed away to produce an animal-head terminal. It represents a beast with broad snout, provided with two incisions indicating the nostrils and large, flat triangular-shaped ears, engraved with a cross on the upper surface. The eyes are indicated by oval grooves from which a line is drawn towards the nostrils, to emphasize the sides of the snout. The base of the head is perforated; there are a few haphazard scratchings on the upper part of the stem behind the head. From Clifford Street.

Fig. 12. 4. Bodkin with slightly curved stem of oval section. The head is pierced through the greatest thickness of the bone and engraved with the eyes and open jaws of a beast; it is separated from the stem by pairs of encircling grooves containing opposed, oblique strokes. From Clifford Street.

Pins and bodkins with zoomorphic terminals are not uncommon during late Viking times in Scandinavia[1] and are frequently found in the early medieval period.[2] Animal-headed bone pins of the ninth century have also recently been published from Jarlshof, Shetland.[3]

Fig. 12. 5. Object of uncertain use, possibly a bodkin. The head is trimmed to a narrow, wedge-shaped section, perforated at the junction with the oval stem. The upper part of the stem is ornamented by bands of incised cross-hatching and rough interlace, and cross-hatching is likewise cut on both sides and on the blunted back of the head. From Clifford Street.

Remarkably similar objects are known from Scandinavian sites, e.g. Trelleborg, Denmark[4] (late tenth to early eleventh century) and from Lund, Sweden[5] (presumably after *c.* 1020), the former being unperforated. The twofold division of wedge-shaped head and oval stem suggests that these objects were designed for specialized use.

Fig. 12. 6. Styliform pin, or stylus, carved in the round to represent a stylized dragon, from the jaws of which protrudes a short rectangular tongue forming an eraser. From Clifford Street.

This object has recently been published[6] by Mr. J. B. Ward Perkins, and little remains to add to his account. In his note, the identification of a bronze object from London, in the Guildhall Museum,[7] as the stem of an early medieval spoon was corrected, in view of the nature of the York piece, to that of a stylus. My attention has since been drawn by Mr. G. C. Dunning to a bone spoon from Chichester, now in Worthing Museum (fig. 15. 3), on which the spatulate bowl is held in the open jaws of a winged beast. The details of the head are carefully rendered and the small wings neatly worked to simulate feathers; unlike the York and London styli, however, no forelegs are represented. The form of this spoon, despite its incomplete condition, can be seen to fall into line with that of a number of bone spoons from London to which Ward Perkins drew attention in his original paper[8] and which, while recognizing the absence of external evidence for their date, he suggested should be relatively early in the medieval series, possibly of the twelfth, or even eleventh, century. Considering the similarity of treatment between the York stylus, which can be dated with reasonable certainty to the eleventh century, and the Chichester spoon, it seems that this view is correct. Allowing for differences in material, then, it would appear that these bone spoons are the predecessors, rather than the contemporaries, of the English series of metal spoons, discussed by Ward Perkins in connexion with the London stylus, which are dated to the late twelfth to early thirteenth century.

[1] e.g. Trelleborg, Nørlund (1948), Tav. xlviii. 3; Hedeby, Jankuhn (1943), Abb. 71*a*; and unpublished material from the town site at Birka (S.H.M. Stockholm).

[2] *Situne Dei, Sigtuna Fornhems Årsbok* (1944), 17, fig. 10.

[3] J. R. C. Hamilton, *Excavations at Jarlshof, Shetland* (H.M.S.O. 1956), 124, fig. 58, pl. xxii b.

[4] Nørlund (1948), Tav. xlviii. 2.

[5] Unpublished; in the Kulturen Museum, Lund.

[6] *Antiq. J.* xxix (1949), 207–9, fig. 1, pl. xxiv *b*.

[7] *Ibid.* xix (1939), 313, fig. 1, pl. lxi *a*.

[8] *Ibid.* 315, pl. lxiv.

Attention may here conveniently be drawn to a small bronze object from Lund, Sweden (fig. 13), in the form of a stylized winged dragon,[1] which provides a close parallel to the treatment, if not the function, of the York stylus. The tail of the beast forms a point and the jaws appear as if held apart by a small bar of round section. The neck is arched, engraved with fine lines to indicate feathering, and the forelegs, partially covered by the wings, are held away from the body and only brought into contact at the throat. This object had no associations but is presumably no earlier than the eleventh century and, on the English evidence, would seem unlikely to be much later.

Fig. 13. Bronze object from Lund, Sweden ($\frac{1}{2}$).

Fig. 12. 7–9. These three pins all have faceted heads, the principal faces enriched with a central, circular depression, in two instances enclosed within an incised lozenge. Nos. 7, 9 from Clifford Street; no. 8 from Goodramgate.

Fig. 12. 10. Pin with flat, tapering perforated head. The ornament of the head is carefully executed, consisting of a triangular panel the apex of which, below the perforation, is filled by a step-pattern; above is foliage and a spiral scroll, the interstices filled with pellets. From Clifford Street.

Fig. 12. 11. Closely similar pin, possibly forming a pair with no. 10, the ornament of the head differing only in detail. From Clifford Street.

The ornament of these pins can perhaps be matched on the eleventh-century hammerhead cross at Middlesmoor, Yorks.[2] where a spiral and debased sort of foliage appear in combination; it is possible, however, that the arrangement of triple leaves on one side of a stalk, surmounted by a single upstanding leaf, owes something to late Saxon plant-forms as seen, for example, on the mounts of the Abingdon ('Wallingford') sword or on the Stockholm disc-brooch.[3]

Pins of this type, with triangular head, may have served a dual purpose, possibly functioning as styli[4] and appear as a recognizable type during Viking and early medieval times. Examples with tapering, perforated head are known from London,[5] decorated with incised ornament of the eleventh-century Ringerike style and on one of two simple examples of this type from York (fig. 14. 1, 2) is scratched a pair of the long, narrow leaves with curled tip, radiating from a common centre, typical of this Anglo-Scandinavian ornament. Such pins are found in Scandinavia,[6] the earlier examples sometimes with similar Ringerike-style ornament, and although not closely dated do not appear to outlast the thirteenth century. Of the rather similar paddle-shaped pins (fig. 14. 3–5), an example with ornamented head, probably late tenth to early eleventh century in date, occurs from London.[7]

A type of pin with perforated, tapering head with cross-piece at the base (fig. 14. 6) may possibly be derived from a form of late Saxon styliform pin represented at Whitby[8] and bone pins with cruciform termination are known from the Viking settlement at Jarlshof, Shetland.[9] Such pins are well represented in Scandinavia during the early medieval period,[10] sometimes unperforated and seemingly adapted as styli, and elaborate versions of the same form, as at York (fig. 14. 7) are likewise common.[11] They appear, generally, to belong to the eleventh and twelfth centuries, but

[1] In the Kulturen Museum, Lund (Inv. No. KM 25575.80C). I am indebted to Mr. R. Blomqvist for permission to draw and illustrate this object.

[2] W. G. Collingwood, *Northumbrian Crosses of the pre-Norman Age* (1927), p. 91, fig. 112.

[3] Conveniently illustrated by Bruce-Mitford, *D.A.B.* pl. xxi B; xxxi A.

[4] Cf. bronze styli with unperforated triangular heads of late Saxon date from Whitby Abbey, Yorks. *Archaeologia*, lxxxix (1943), 64, fig. 15. 1, 2, 4–7.

[5] Wheeler (1927), 49, fig. 27. 1; *Brit. Museum Anglo-Saxon Guide*, 113, fig. 140.

[6] Grieg (1933), 241, fig. 209. From Sweden, similar pins are published from Sigtuna, *Acta Archaeologica*, i (1930), 108–9, fig. 12 and there are a number, unpublished, from Lund in the Universitets Historiska and Kulturen museums.

[7] Wheeler (1927), p. 50, fig. 28. 3.

[8] *Archaeologia*, lxxxix (1943), 64, fig. 15. 3.

[9] *Proc. Soc. Antiq. Scotland*, lxix (1934–5), 293, fig. 22. 3–5.

[10] Grieg (1933), 243, fig. 211.

[11] *Sigtuna Fornhem: Vägledning* (Sigtuna, 1935), 19; other examples, unpublished, from Lund. (Universitets Historiska Museum.)

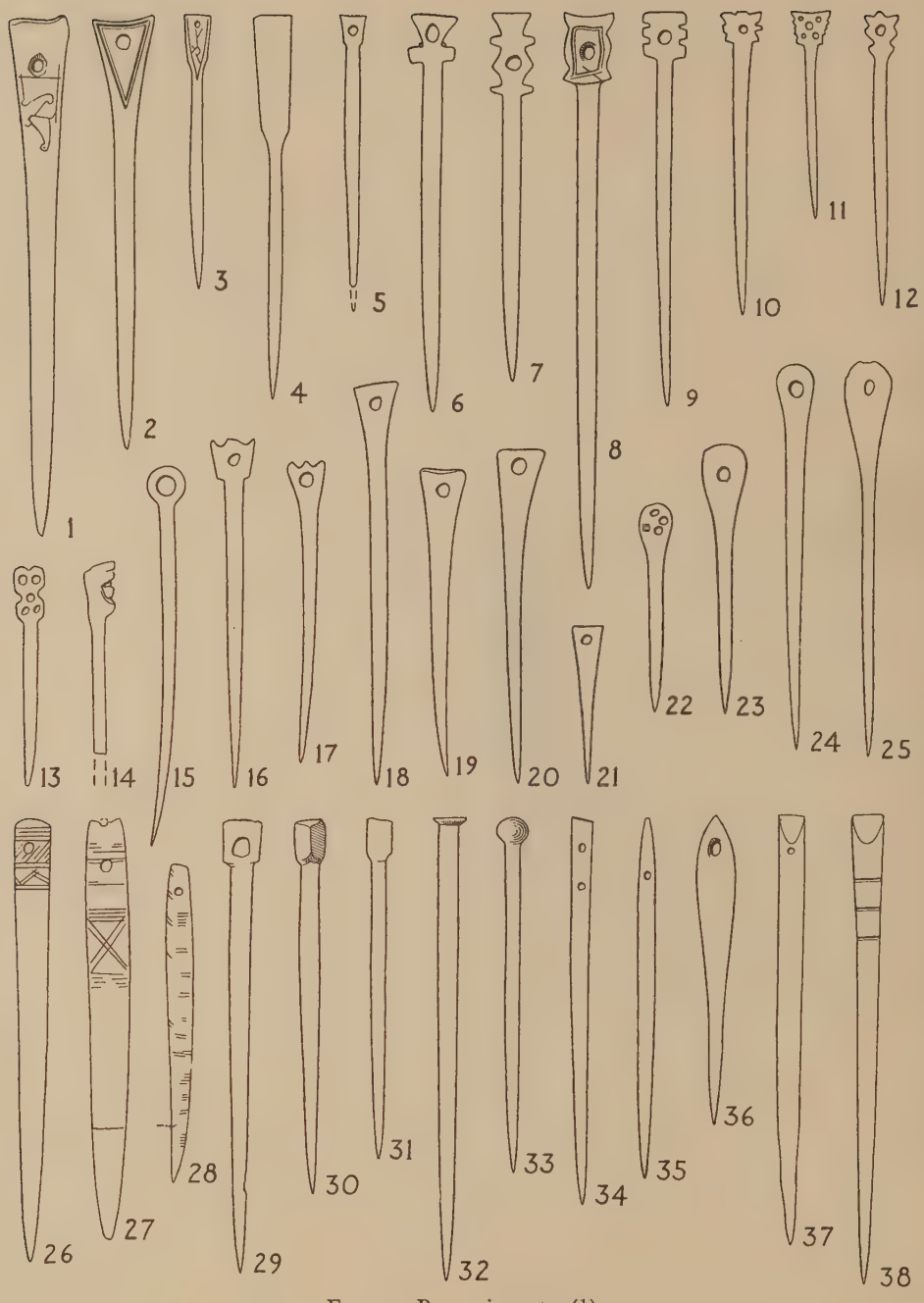


FIG. 14. Bone pins, etc. (½).

Nos. 3–5, 9–11, 13–15, 17, 18, 22–24, 26, 30–38, from Clifford Street.
Nos. 16, 28, from Coppergate.
Nos. 7, 12, 27, from Nessgate.
Nos. 2, 25, 29 from Pavement.

Implements of pointed bone

Photo. M. B. Cookson

their later history is uncertain. A somewhat similar pin from York (fig. 14. 8), in which the arms of the head are less clearly defined, has parallels from the Viking site at Hedeby.[1] Also common is a series of pins with roughly squared, perforated head, usually elaborated by a number of lateral incisions (fig. 14. 9–11). These again appear in Scandinavia on sites of the Viking Age[2] and certainly continue into the early medieval period.[3]

Comment on the bulk of the remaining pins (fig. 14) would be superfluous as they are for the most part devoid of distinctive features.[4] With few exceptions (p. 84, bottom; no. 16 is from the Coppergate Group A deposit), they all were found in the Clifford Street excavation and may be attributed to an eleventh-century date, as the more determinable material from the same source suggests. Pins manufactured from pig fibulae (nos. 17–25), the head sometimes rounded, are extremely common, as indeed they are from Early Iron Age times onwards[5] and are only mentioned here as the leading form at Clifford Street. In a few examples (nos. 37, 38) the broad end is trimmed to a square edge, possibly for use as a stylus. The long bodkin (pl. XVI, 7 from Clifford Street) with rounded perforated head and broad collar, has numerous parallels from Scandinavian Viking sites where they appear possibly in imitation of similar collared pins in bronze.[6]

Large prickers or bodkins are numerous at Clifford Street and elsewhere (pl. XVI, 1–5, 8, 9) and are sometimes simply ornamented by incision. A number of small bone points (pl. XVI, 10–14), with squared or rounded head having one face worn smooth through use, may have served as smoothers or burnishers; the worn face is usually hollowed or bevelled towards the top edge, the reverse face exhibiting little sign of use.

Wooden Spoons

Two wooden spoons were found at Clifford Street. The first (fig. 15. 1) has a hollow, keeled bowl, the end of which is now much frayed, with flat, ribbon handle, shouldered above the bowl and widening towards the head, where it terminates in a projecting, fan-shaped tongue. The upper surface of the handle is ornamented with an incised step-pattern, the alternate units shaded, and two runes are cut in one of the blank panels. The second spoon (fig. 15. 2) has a rather flat, narrow bowl, much distorted and now set angularly to the flat ribbon handle. The handle is shouldered above the bowl and at the head, bearing on the upper surface an engraved three-strand angular plait, edged by alternately shaded chevrons, and terminating in an interlace knot.

In this country these two spoons stand alone and bear no resemblance to the few known bone spoons of early medieval date.[7] In Scandinavia spoons of bone, horn, and wood are common and occur during the Viking Age[8] with round or oval bowl, separated from the handle, which is proportionally shorter than in the York examples, by a shoulder or other more elaborate moulding. The handle may be plain or ornamented with interlace, which sometimes extends over the bowl. The same form appears in the early medieval period,[9] usually with pure geometric interlace which may betray early Romanesque elements.[10] A later series, with oval bowl and shorter handle, may reflect the form of contemporary metal spoons.[11]

[1] Jankuhn (1943), 134, Abb. 70 *f*, *m*. A pin of this type, with multiple perforations through the head, occurs at Thetford (M.O.W. collection).

[2] e.g. from the town site of Birka (unpublished, S.H.M. Stockholm). Cf. Jankuhn (1943), p. 134, Abb. 70 *e*.

[3] At Lund (unpublished: Universitets Historiska and Kulturen museums).

[4] For pins of known Viking date in Britain, note those found with the Cuerdale hoard, *Antiq. J.* xxi (1941), 162, fig. Others are published from Freswick, Caithness (*Proc. Soc. Antiq. Scotland*, lxxiii (1938–9), pl. xlviii), and from Jarlshof, Shetland (Hamilton (1956), *op. cit.*).

[5] See H. O'N. Hencken, 'Cahercommaun', *Proc. Soc. Antiq. Ireland* (extra volume, 1938).

[6] Arbman (1943), Taf. 170. 8.

[7] *Medieval Catalogue* (London Museum Catalogues: no. 7, 1940), 127, pl. xxv.

[8] Arbman (1943), Taf. 151; a similar series is present from the town site at Birka (unpublished; S.H.M. Stockholm). See also *Bergens Museums Årbok* (1932), p. 10, fig. 4.

[9] Floderus (1941), 99, right of fig.

[10] *Acta Archaeologica*, i (1930), 109.

[11] Grieg (1933), 105, fig. 55.

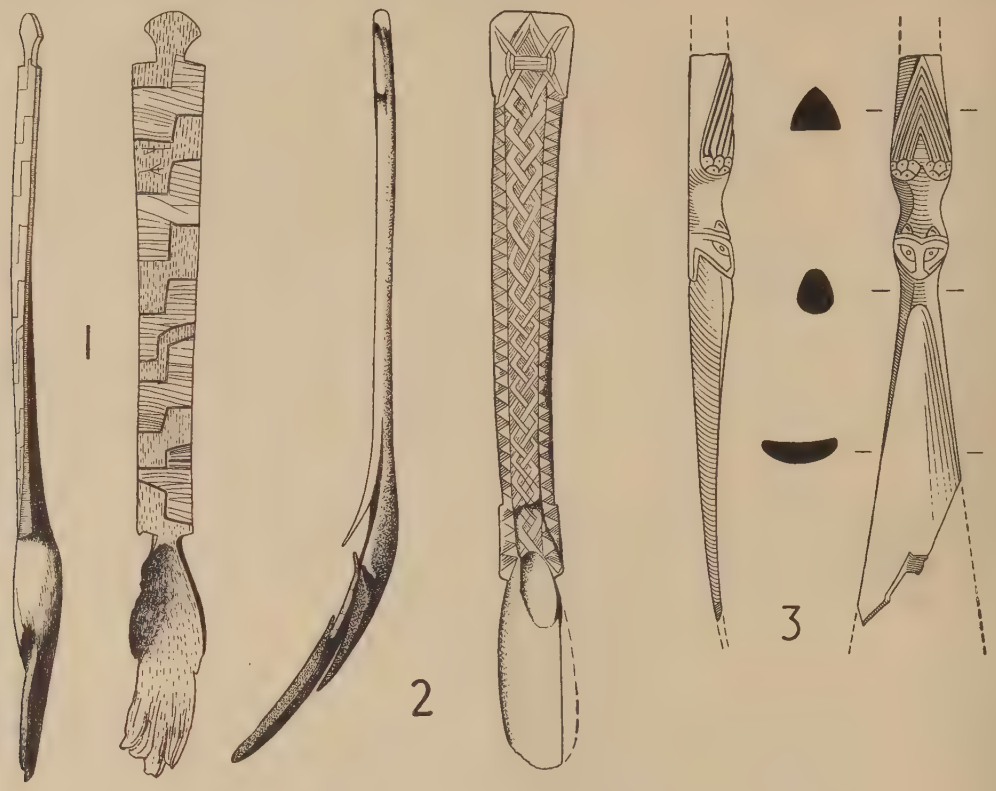


FIG. 15. Spoons of wood from York (1, 2, $\frac{1}{2}$) and of bone from Chichester (3, $\frac{1}{1}$).

Wooden Casket with Bone Mounts

The fragments of an oak casket, covered with plain and ornamented bone strips, retained in position by flat-headed iron pins, about 0·35 in. long, driven in flush with the surface (pl. XVII) was found in the Coppergate Group A deposit. The engraved ornament consists for the most part of simple, compass-drawn, single or concentric circles, sometimes with open centre but a more elaborate openwork, set within an incised pointed-oval border, is backed by thin pieces of sheet bronze, evidently gilded on the upper surface, which when new would have served to emphasize this feature of the design.

Openwork ornament can be seen on continental ivory reliquaries, such as those from the abbey church, Werden, and St. Gereon, Köln, dated respectively to the eighth or ninth, and tenth centuries.[1] On many Irish shrines, moreover, openwork ornament is frequently found; these shrines, of wood or bronze, are sometimes covered with openwork plates which are silvered or gilded to contrast with the backing material,[2] the openwork being usually purely geometrical in form. Shrines on which such openwork ornament appears were made, in the main, during the eleventh to twelfth centuries[3] but similar ornament still appears as late as the fifteenth century; it is possible that openwork was used on shrines prior to the eleventh century[4] but the fact that

[1] A. Goldschmidt, *Die Elfenbeinskulpturen*, ii, Taf. liv–lvi.

[2] See H. S. Crawford, *J. Royal Soc. Antiq. Ireland*, liii (1923), 77, fig. 2.

[3] e.g. shrine of the Stowe Missal, *Christian Art in Ancient Ireland* (ed. A. Mahr, Dublin, 1932), 154, pls. 66, 67; shrine of St. Columba's Psalter, *ibid.* p. 155, pl. 114; shrine of St. Patrick's Bell, *ibid.* p. 156, pl. 80; shrine of Dimma's Gospels, *ibid.* p. 163, pl. 102.

[4] Possibly on shrine of St. Mogue, *ibid.* p. 152, pl. 62; shrine of St. Molaise's Gospels, *ibid.* p. 119, pl. 57.

these shrines have frequently been subjected to alteration and repair makes difficult the dating of original elements.

Sheet bronze used as a backing to openwork ornament occurs on a number of bone combs in England[1] and during the early medieval period in Scandinavia,[2] and it has been suggested that, despite their rarity in this country, the Scandinavian examples should be regarded as importations from England.[3] On the other hand, whereas combs of this type are apparently lacking in Scandinavia during Viking times, the openwork technique is to be found on a group of knife scabbards of this date[4] and it is possible that it was from this source that the combs derived their characteristic decorative feature in the eleventh century. While no close dating for the combs at present is possible, it seems generally agreed that they do not appear later than the beginning of the thirteenth century.

Combs and Comb-cases

Bone combs are notoriously difficult to date, for conservatism in design has resulted in two basic forms enjoying a protracted popularity from Roman times to the middle ages. The double (two-sided) comb, for example, is a late Roman type which continued in the Saxon period both early and late; in face of the Viking single-edged long comb its popularity may have waned but it returned to favour in post-Conquest times and in one form or other remained the typical comb of the middle ages. The single-edged comb, frequent enough in pagan Saxon contexts, is the leading form of the Viking Age and although continuing in later use, appears to be largely replaced by the developed double comb after the twelfth century.

The typical Viking single comb has a straight bow, usually ornamented, with convex outline to the upper edge. Especially characteristic is an arrangement of carefully executed ring-and-dot ornament, often in the form of a recumbent S or figure-of-eight, sometimes combined with vertical incisions, but it is of rare occurrence in the British Isles.[5] Interlace ornament is frequently found on the finer combs, usually confined to a narrow panel at the centre of the bow, sometimes with wedge-shaped, medial panels of similar ornament on either side and the outline of the bow is emphasized by a groove; some combs have everted terminals which when treated zoomorphically are nearly always confined to combs with this pattern arrangement (fig. 16. 1 from Clifford Street). Incised designs of purely geometrical figures, cross hatching, shaded triangles, and the like, are extremely common on Viking combs but seem to be of little use for dating purposes. The later development of combs, either single or double, has not been studied in this country, where datable material is scanty.[6]

A number of combs which may be dated with some confidence to the late tenth to eleventh centuries were found in Clifford Street (fig. 16, pl. XVIII, 4) and other single combs have been recovered from unrecorded sites in the city (pl. XVIII, 1–3, 5, 6); of the latter, no. 2 is provided with three T-shaped openings on both faces of the bow, which originally would probably have been backed by thin sheets of gilt bronze[7] and no. 9 is part of a single comb which has been broken and trimmed for re-use.

[1] e.g. London (*V.C.H. London*, i. 164, fig. 27); Northampton (*Proc. Soc. Antiq. London*, xvii. 167). An openwork comb of bronze occurs at Whitby, *Antiq. J.* ix (1929), 158.

[2] Blomqvist (1942), pp. 142–8; Floderus (1941), p. 89; see also *Situne Dei, Sigtuna Fornhems Årsbok* (1944), pp. 15–17; Grieg (1933), pp. 223–4; Nationalmuseet, Copenhagen, unpublished examples.

[3] Grieg (1933), p. 224.

[4] Arbman (1943), Taf. 180. 6.

[5] Arbman (1943), Taf. 160. It occurs in Scotland, *V.A.* ii, figs. 42, 44.

[6] For Sweden, however, there is Blomqvist's study, based on the extensive series from Lund, Blomqvist (1942), and in Norway, Grieg's treatment of the finds from Bergen and Oslo, Grieg (1933).

[7] This technique has been mentioned above, notes 1, 2, and is mostly confined to combs of distinctive form, Blomqvist (1942), figs. 26, 27, 30. But it is also applied to single combs of normal type and an exact parallel to the York example is published from Lund, *ibid.* fig. 5. Such ornamental treatment is also occasionally found on double combs, *ibid.* figs. 54, 65.

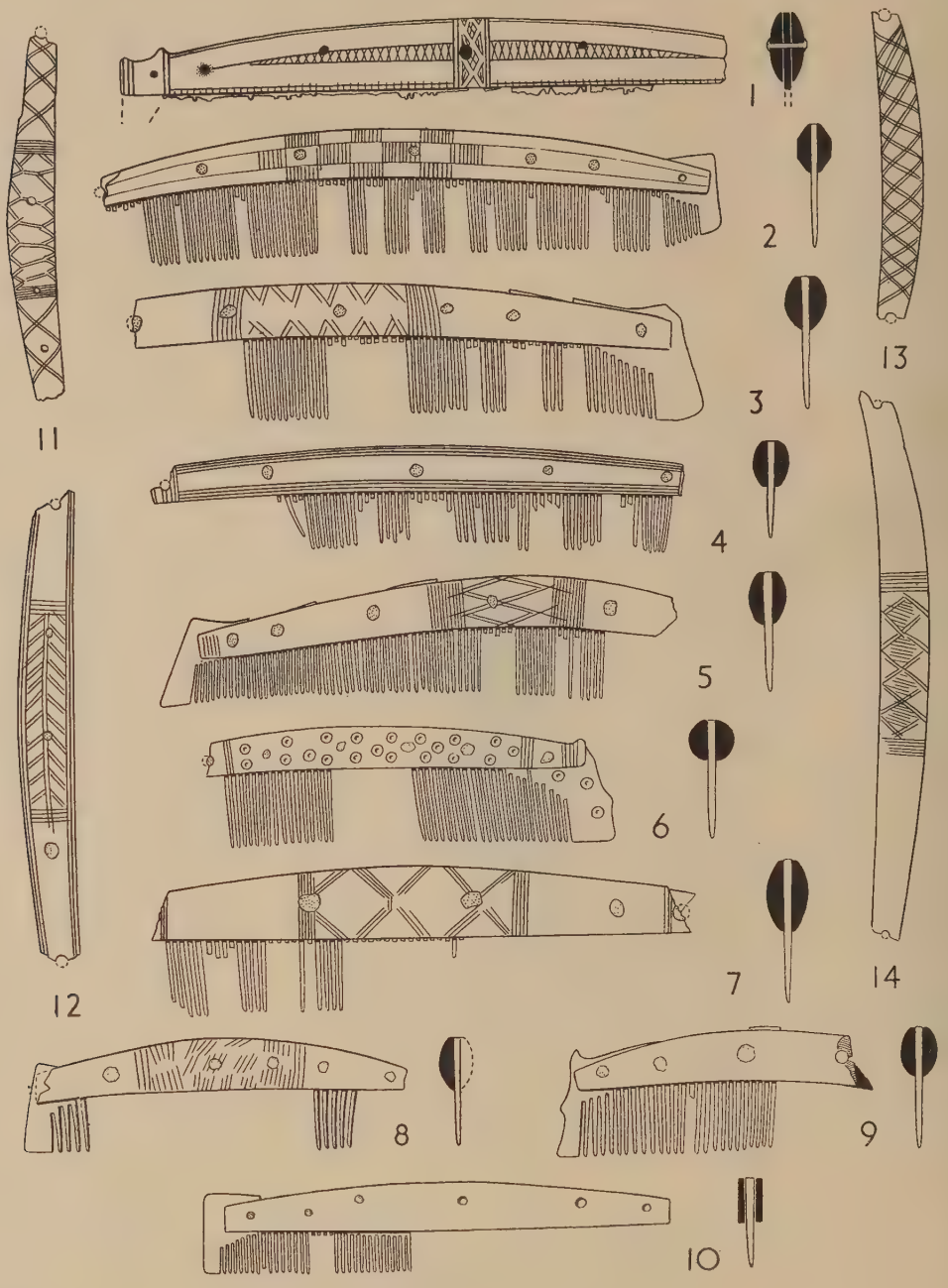
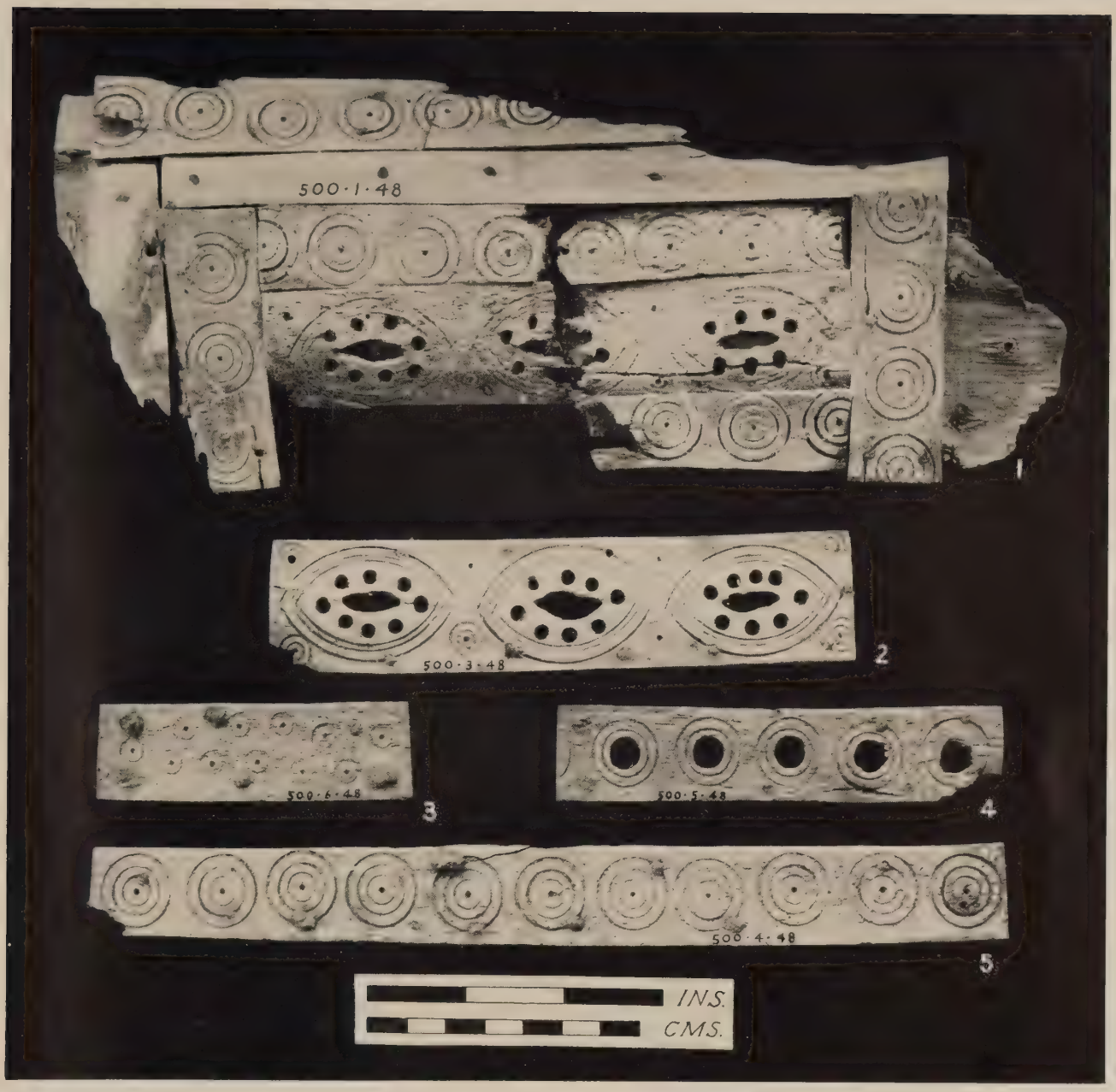


FIG. 16. Bone combs from Clifford Street ($\frac{1}{2}$).

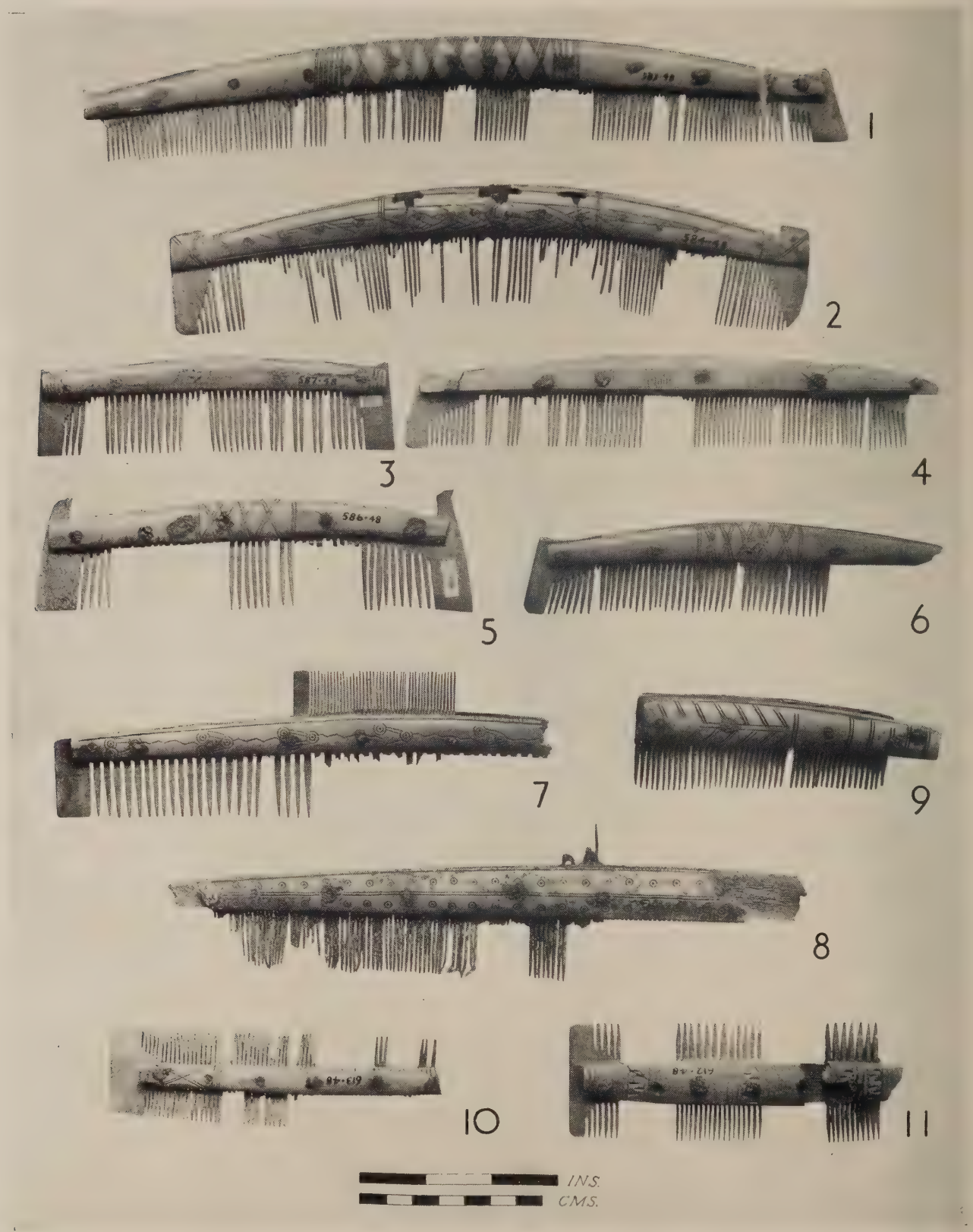
In Scandinavia the double comb is of rare occurrence during Viking times[1] and is not well attested in common use before the twelfth century. It is scarce from York; three examples only have been found, one from Clifford Street (fig. 17. 3) and two from unrecorded sites (pl. XVIII, 10, 11). The Clifford Street fragment, together with no. 11, bears chevron ornament, economically

[1] I have noted only two examples in the large series from the town site at Birka (unpublished, S.H.M. Stockholm).



Fragment of oak casket with bone mounts from Coppergate

Photo. M. B. Cookson



Bone combs

Photo. M. B. Cookson

rendered by V-notching of a plain band, which, although not closely datable, occurs on combs of the Viking period from Scandinavia and is sometimes found on the handled combs described below.

Two unusual combs from York (pl. XVIII, 7, 8), may be described as normal single combs provided with a subsidiary set of finer teeth which extend for only part of the length of the back.

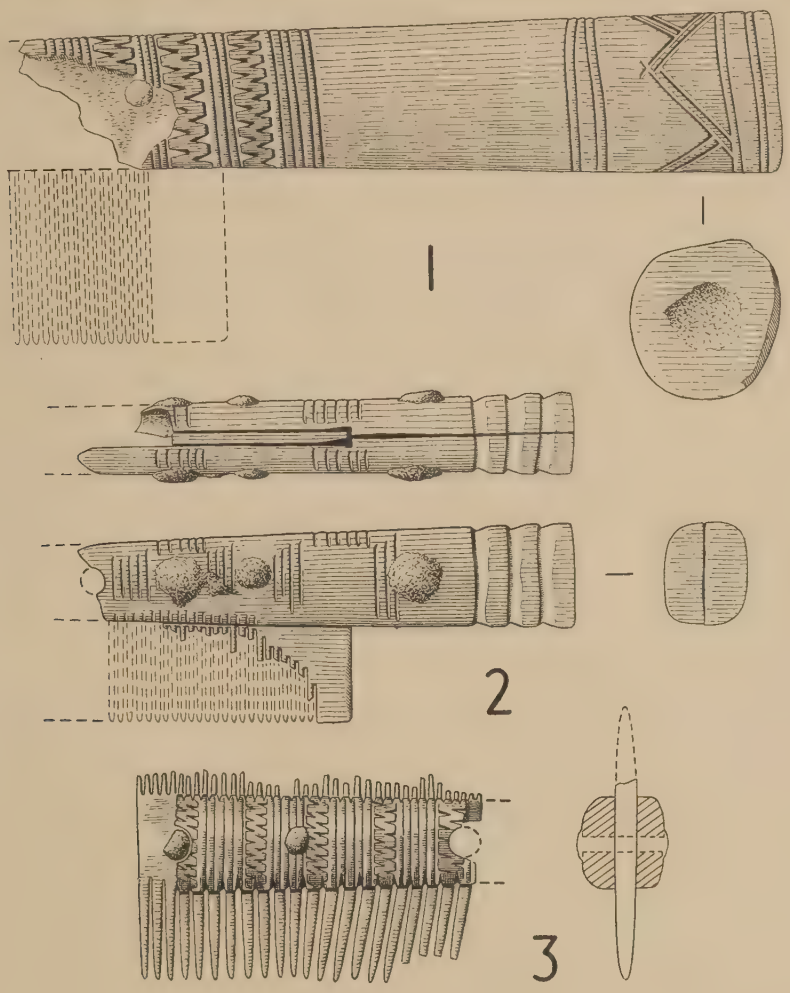


FIG. 17. Bone combs ($\frac{1}{1}$).

Combs of this type are rare[1] and in Britain may most likely be attributed to an early medieval date.[2]

Finally, mention must be made of a type of handled comb, with teeth on one side only, which is known sporadically from England, the Rhineland, the North Sea coast of Holland, and Scandinavia, and which is possibly of Frisian origin or at least owes its distribution to Frisian trading

[1] An example is published from the late Viking settlement at Freswick, Caithness, *Proc. Soc. Antiq. Scotland*, lxxiii (1938–9), 96, pl. xlvii. 3.

[2] See, however, G. Behrens *Merowingerzeit* (Römisch-germanisches Zentralmuseum zu Mainz, Katalog 13; Mainz, 1947), p. 76, Abb. 155, for an earlier instance of a comb of this type.

activities. In Scandinavia, these combs are infrequently found, either in Viking[1] or early medieval[2] contexts, and were perhaps derived, in the first instance, from trade connexions, via Hedeby, with Dorestad, where such combs are more common.[3] Similarly, trade with Dorestad or succeeding *emporia*[4] was possibly responsible for the initial appearance of these combs in England where, apart from York, the type is widely distributed,[5] while a single example has been recognized in Ireland.[6] Two handled combs occur in York (fig. 17. 1, 2, the latter from Pavement). The first has a solid handle, slotted to receive the teeth and is ornamented with bands of chevron and engraved lines; in the second, the separate side pieces are continued to form the handle and held together by iron rivets, the butt moulded and the sides engraved with a panel decoration of vertical incisions.

The single-edged comb was sometimes carried in a case, provided with two perforations, one for suspension of the case from the person, the other corresponding to a hole in the end-plate of the comb itself, which could thus be secured in position by means of a peg.[7] The normal Viking comb-case is composed of two strips of bone on each side, held together by end-plates of little or no projection; the back is of convex outline, corresponding to the back of the comb when placed in the case.[8] The type persists into the eleventh to twelfth centuries, at least, and two examples from York are figured (pl. XIX, 1, 8; the latter bears on the back edge an incomplete runic inscription, fig. 18). In the later comb-cases, the sides are frequently formed of single strips of bone, secured by end-plates often of bold projection and sometimes with elaborately carved extremities,[9] but the shape has considerable variation. A number of these later examples from York are illustrated (pl. XIX, 2–7).

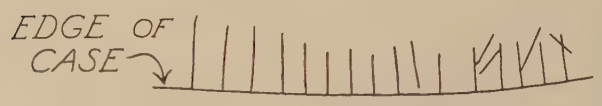


FIG. 18. Runic inscription on bone comb case ($\frac{2}{1}$).

Miscellaneous Bonework

This section includes a variety of objects, some of uncertain use, which will demonstrate the wide range of bonework from the city.[10]

[1] For an example from the town site at Birka see H. Arbman, *Schweden und das karolingische Reich* (Stockholm, 1937), 238, Taf. 74.

[2] From Lund, Blomqvist (1942), fig. 10; from Bergen, Grieg (1933), fig. 183.

[3] *Oudheidkundige Mededeelingen*, N.R. xi (1930), Abb. 72. 103.

[4] The problem of trade relations between Britain and the Continent after the destruction of Dorestat in the ninth century is discussed by G. C. Dunning, *D.A.B.* p. 221.

[5] e.g. Bedford (*Proc. Soc. Antiq. London*, xii. 115); Cambois, Northumberland (*Brit. Museum Anglo-Saxon Guide*, p. 101); Canterbury (J. Brent, *Canterbury in the Olden Time* (1879), pl. 17, fig. 3); Flatford Mill, Suffolk (Ipswich Museum); Great Wakering, Essex (*V.C.H. Essex*, i. 329); Ipswich (Ipswich Museum); St. Osyth, Essex (Colchester Museum); Southampton (unpublished); Whitby, Yorkshire (*Archaeologia*, lxxxix (1943), 70, fig. 20. 1); London (*V.C.H. London*, i. 164); several examples from River Thames (Wheeler, *London and the Saxons* (London Museum Catalogues: No. 6, 1935), 152, fig. 30; *Proc. Soc. Antiq. London*, iv. 188; vi. 458; Reading Museum (unpublished); comb without exact provenance, Ashmolean Museum, Oxford).

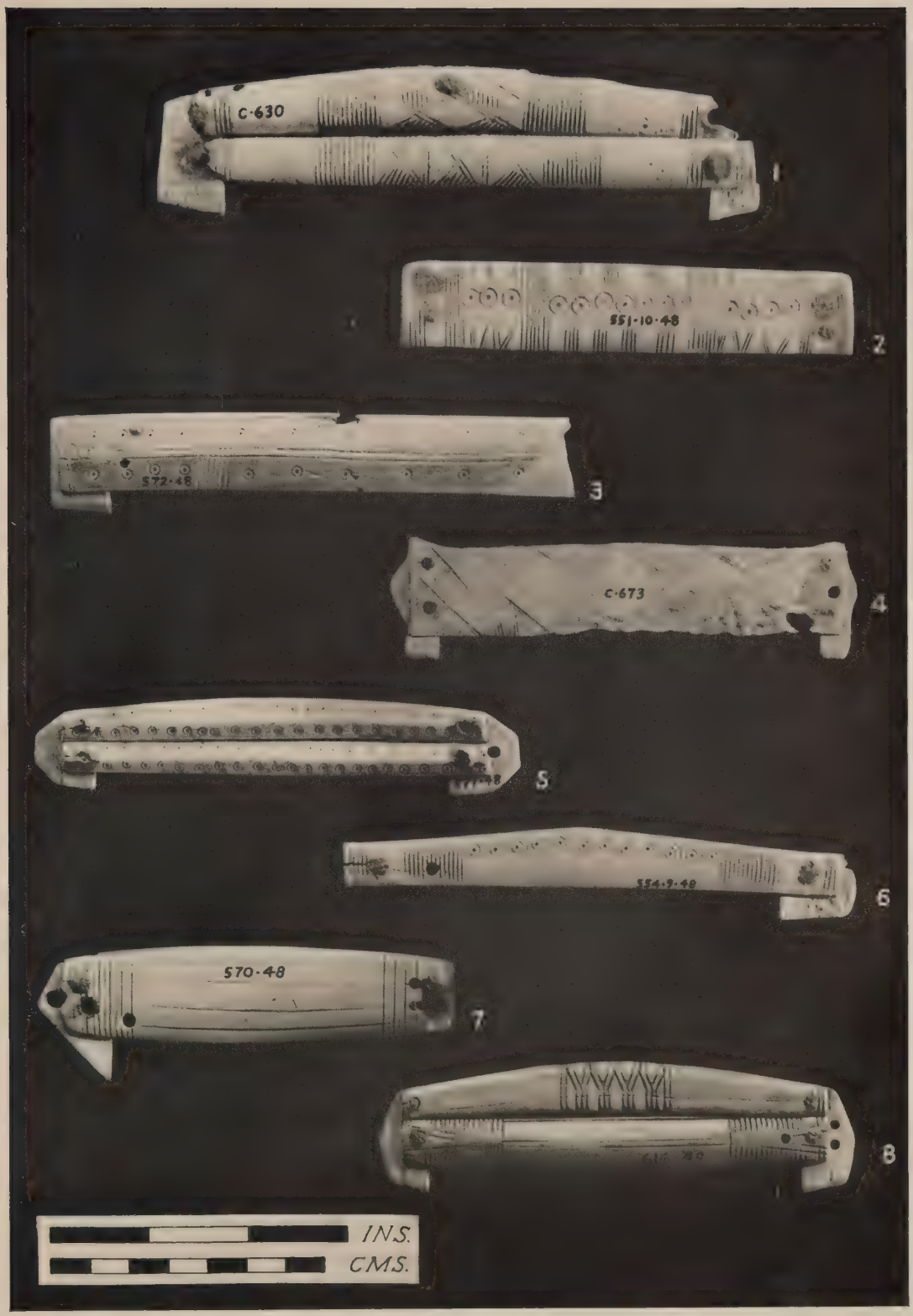
[6] H. O'N. Hencken, 'Lagore Crannog', *Proc. Royal Irish Academy*, liii (1950), C. 1. 187, fig. 99.

[7] A complete comb, with case, from York is in the British Museum, *V.A.* iv, fig. 62.

[8] For examples, Arbman (1943), Taf. 163. 1, 3, 5.

[9] Blomqvist (1942), figs. 24, 25, 43, 44.

[10] Two elaborately ornamented objects of antler, of unknown but clearly specialized use, have been published from York, both with zoomorphic terminals and with one or two protruding points at the smaller end. The first, from Hudson Street (now Railway Street), is in the Sheffield Museum (*V.C.H. York*. ii. 106, fig. 25; the length of the object is actually 3·65 in.) and has both ends treated in zoomorphic fashion; the second, probably from Ousegate, is in the British Museum (*V.A.* iv. 99, fig. 64; *The Reliquary and Illustrated Archaeologist*, x (1904), 270–5) and has the broad end only treated as a beast-head. An ornamented object, 3·75 in. long, closely resembling the Ousegate piece has been found at Jarlshof, Shetland (Hamilton (1956), *op. cit.* 149, pl. XXIX, 2) and like the York example has an oblique perforation extending from the mouth to throat; a curved pointed object of antler, 4·5 in. long, from the town site at Birka (unpublished: S.H.M. Stockholm) has a zoomorphic terminal similarly treated. An object of morse ivory from Bramham, W. R. Yorks. may also be mentioned here, *Yorks. Archaeol. J.* xxxii (1936), 339–40.



Bone comb cases

Clifford Street, 1, 4; Coppergate, 2; Pavement, 6

Photo. M. B. Cookson

Ornamental bonework

Photo. M. B. Cookson

Trial Piece (pl. xx, 1). Two fine guide lines have been scribed parallel to the natural edge of the bone, within which is engraved a frieze of animals, partially filled out by a tangle of interlace; two confronted beasts, drawn to a smaller scale, and further interlacings appear below. The animals of the frieze are, with one exception, shown crouching or with humped hind-quarters, with back-turned heads, and conventionalized paws; one beast grasps its tail within its jaws, the tail of another terminates in a leaf-bud and a pendant tri-lobed leaf occupies the space between the hind-quarters of two of the animals. The animal forms may be compared with those that appear in the late Saxon art-style sometimes called after Trewhiddle (Cornwall), although the panelled treatment of the Trewhiddle and allied finds is absent on the York piece; a date in the second half of the ninth century for the carving on the York bone may be suggested.[1]

Pendants (fig. 19. 1–4). These four objects, cut from antler, are of similar form and presumably of similar purpose. Three are perforated through the broadest part; from side to side, with an intersecting perforation through the base (no. 2 from Clifford Street); obliquely from side to base (no. 1); or from side to side (no. 3), while the fourth (no. 4 from Clifford Street) shows the beginning of a similar lateral perforation and is evidently unfinished. Two are ornamented; no. 2 has an engraved step-pattern on both faces, practically worn away on the reverse, and a wedge-shaped panel, filled with fine oblique incisions, on one side. The two points have crude, barely recognizable zoomorphic terminals and animal masks, with large ears, are cut on the sides in relief, flanking the perforation. No. 1 bears on one face a double groove, following the outline of the object, filled with hatched lines and similar hatching, crudely cut and lacking a border, on the other. Animal masks, paired in one instance, appear on the sides. These objects are called pendants without prejudice as to their actual use. Evidence of wear at the perforations suggests that they were intended for suspension and the decorated examples may indeed have been worn as ornaments. The distinctive shape, however, suggests that they may have been put to some practical use at the same time although, in view of the decorative treatment of the points, this is unlikely in the case of no. 2.

Another object, similarly cut from antler (fig. 19. 5 from Clifford Street) is provided with a small, hook-like projection and although unperforated is sufficiently similar to the objects above to be included here.

Buckles (fig. 19. 6, 7). Both are cut from a single piece of bone, in one case with a separate tongue which rotates on a pivot of the same material. The method of attachment to the belt differs. The complete example, with an engraved interlaced knot on the plate, is provided with a notched projection to pass through a corresponding hole cut in the material of the belt; in the other, the end is cleft, to a depth of 0·5 in. and for the full width of the plate, to receive the end of the belt which was secured in place by a pair of bronze pins.

A bone buckle with interlace ornament on the plate and a bronze tongue, attributed to the tenth century, was found at Goodmanham, Yorks.[2]

Flutes (fig. 19. 10, 11). Two flutes of hollow bone, fractured at both ends, were found in Clifford Street. Similar objects were common over a long period and have been found on Viking sites, e.g. at Hedeby[3] and at the late Saxon town at Thetford, Norfolk.

Ornamental bone strips (pl. xx, 2, 3, the latter from St. Leonard's Place). The first, fractured at one end, is plano-convex in section, the convex surface ornamented with a panel of interlace, and has oval perforations, one now incomplete, at the extremities. The other, of rectangular section, is ornamented on one face with bands of chevron ornament between transverse incisions (cf. fig. 17. 1, 3); at one end is a large oval perforation and three small perforations in line at the other.

Mounting (fig. 19. 17). This object, cut from a piece of thin bone, represents a bearded human face and seems most likely to have served as an ornamental mount. Hair and beard are indicated by engraved lines and the nose and mouth are similarly treated; the eyes are represented by

[1] For a bone trial-piece, probably of Viking date, from the site of York castle see *Antiq. J.* xx (1940), 285.

[2] *V.C.H. York.* ii, pl. 1. 1.

[3] Jankuhn (1943), 162, Abb. 79.

perforations set within incised circles and a third perforation is pierced through the bridge of the nose.

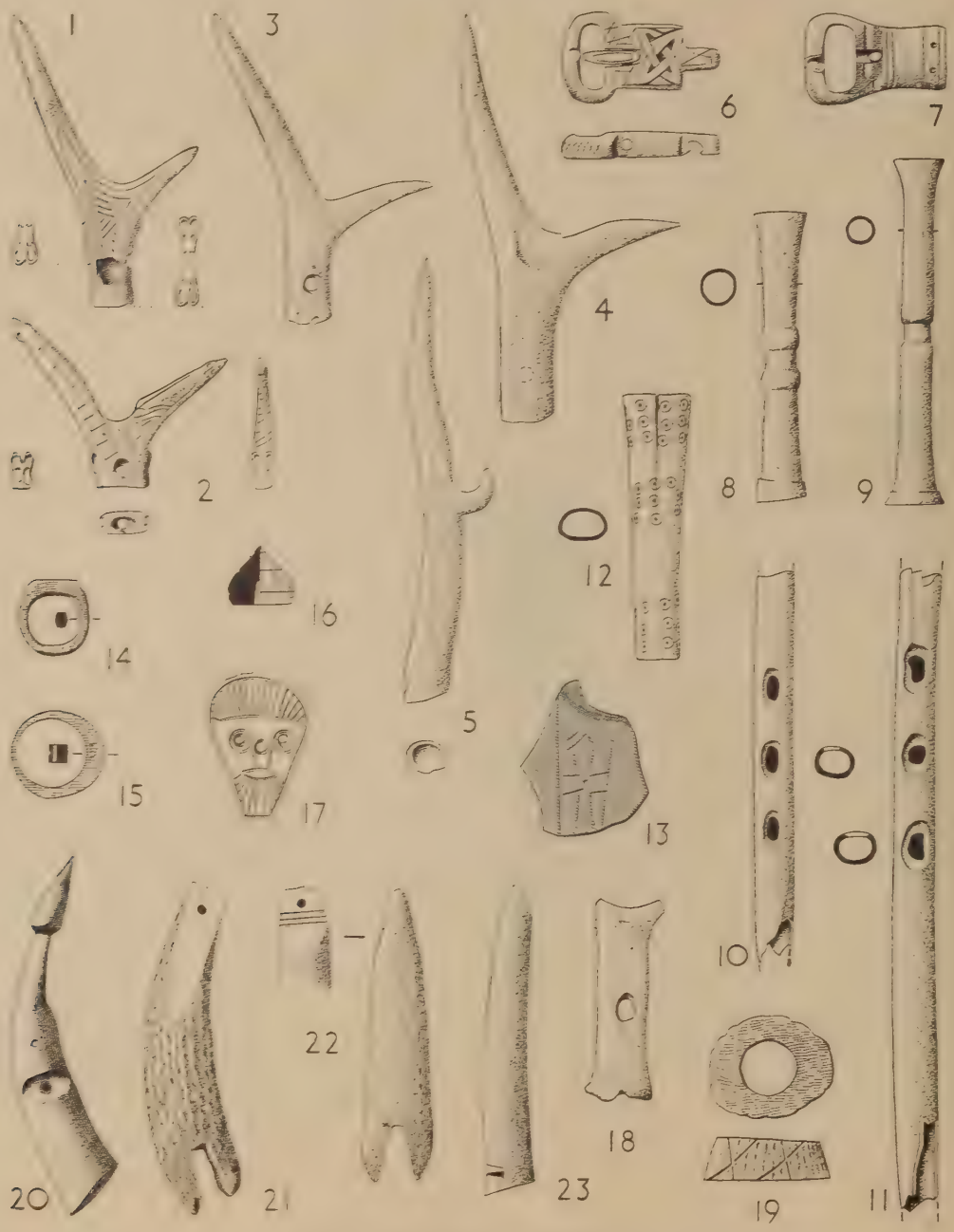


FIG. 19. Miscellaneous bonework (½).

Other small objects from Clifford Street (fig. 19). These include two hollow lengths of bone with expanded ends and central moulding (8, 9), possibly intended as bobbins for shuttles;[1]

[1] See Lt.-Gen. Pitt-Rivers, *Excavations in Cranborne Chase*, ii (1888), 173.

Antler points

Photo. M. B. Cookson

Implements of antler and bone

Photo. M. B. Cookson

a knife handle with ring-and-dot ornament (12); a fragment of bone incised with a simple cross (13); two plain finger-rings (14, 15), and a gaming piece, perforated on the underside (16). Perforated metacarpal bones of pig (18) often identified as dress-fasteners[1] and sawn sections of antler, perforated through the centre (19) are included, as well as several objects of antler (20–23) of unknown purpose but clearly designed for specialized use.

Antler Points (pl. XXI). These are extremely common in York, not only from Clifford Street whence came most of the examples illustrated but also from other sites in the city. They vary considerably in size, many with socketed butt, some with lateral perforation at the butt-end, but are alike in having a blunted point, either natural or knife-trimmed. A large number are ornamented mostly by means of encircling grooves, the divisions so formed usually filled by diagonal incisions or by shallow borings. So far as any one explanation of their use is possible, it may be suggested that these points were used as 'fids' to open the strands of a rope for splicing; they were no doubt employed for other purposes.

With these objects may be included the forked implements of antler shown on pl. XXII, 1, 2, together with the socketed point, no. 3, which was evidently designed to accommodate a handle, as the lateral peg-holes suggest. All three examples are from Clifford Street and all show the same simple ornament found on the single points.

Also represented at Clifford Street are a few objects (pl. XXII, 4–7) of gouge-like form, normally made from the metatarsal bones of ox; they are sometimes hollowed along the length as if to receive a handle, and are trimmed on one side to form a blunt point. Like the antler points, these objects are usually ornamented by transverse and diagonal incisions.

SPINDLE WHORLS

These objects are commonly found in York and stray examples are usually impossible to date with any certainty; the examples figured (fig. 20) are representative of the large number recovered

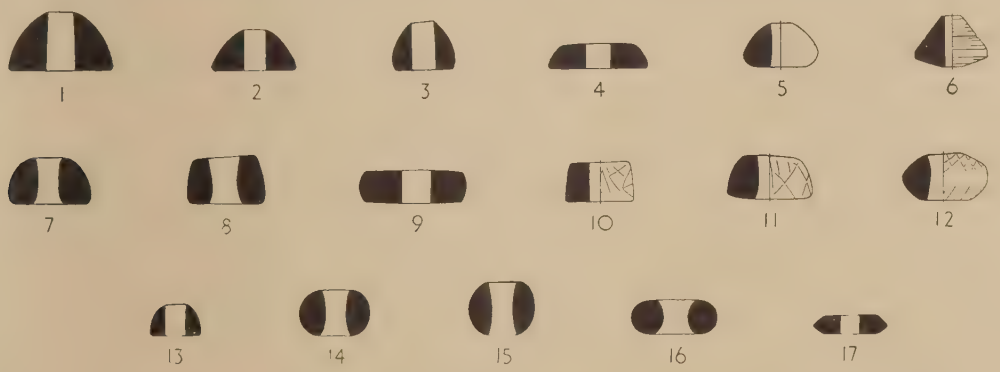


FIG. 20. Spindle whorls (⅓). Nos. 5 and 6 are of pottery, the former of whitish clay with buff surfaces showing traces of bands of reddish paint, the latter of buff coloured clay with grey core.

from the Clifford Street excavation. They are made variously of bone (1–4), pottery (5, 6), chalk (7–12), lead (13), stone (14–16), and jet (17). The commonest type, frequently found elsewhere on prehistoric and later sites, is made from the head of an ox femur. In the case of the chalk whorls, advantage has sometimes been taken of the soft nature of the material to produce simple incised ornament. In pottery, the bi-conical form is frequently found on Viking and early medieval sites in Scandinavia; on the other pottery whorl are traces of decorative bands, apparently of reddish paint. The small lead whorl is also a common Viking form and the single jet example is a rare instance of the use of this material in the city during the period.

[1] Examples have been found at the Viking settlement at Freswick (*Proc. Soc. Antiq. Scotland*, lxxiii (1938-9), 97, pl. xlviii. 11–14, where their use is discussed).

OBJECTS OF JET

Local sources of jet were occasionally exploited at Whitby during the occupation of the Saxon monastery[1] and some of the raw material utilized during Viking times in Scandinavia was probably derived from the east Yorkshire deposits.[2]

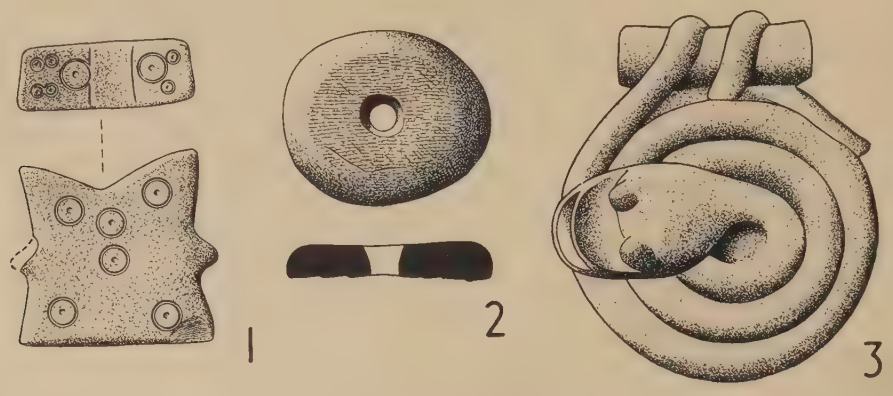


FIG. 21. Objects of jet (1, 3, $\frac{1}{1}$; 2, $\frac{1}{2}$).

From an unlocalized site in York comes a pendant of jet in the form of a coiled serpent (fig. 21. 3). Similarly treated pendants of gold, silver, and bronze occur in Norway[3] and Sweden[4] in the Viking Age and a comparable example in jet is considered to be of Norse workmanship, fashioned from material imported from England.[5]

A chessman of jet (fig. 21. 1) with cleft top and lateral projections was found apparently in the same deposit with the bronze pin, fig. 11. 13, and the bone object, fig. 12. 2, under the Coach and Horses Inn, Nessgate. Both faces bear six ring-and-dot incisions and there are similar incisions on each splay of the head, five on one side and three on the other, of which one in each case is larger than the rest. This piece evidently represents the warder, or castle, of modern chess and assumes the conventionalized form adopted by the Arabs for the chariot and horses of the original oriental war-game.[6] The date of the introduction of chess into this country remains uncertain and those chessmen known cannot safely be considered pre-Conquest, despite suggestive indications of an earlier date. A jet chessman similar both in size and shape to the York piece was found at Grime's Graves, Norfolk, unfortunately without associations.[7] It is ornamented on both faces with six ring-and-dot incisions, linked by fine grooves, and on each side of the cleft head are six similar incisions, of which one in both cases, as in the York example, is larger than the others.

The only other object of jet from York is an oval perforated disc from Clifford Street (fig. 21. 2), the upper surface smoothed, the underside untrimmed and irregular.

BEADS

It has been suggested that the Clifford Street finds indicated the existence nearby of artisans' workshops, by reason of the numerous unfinished or spoiled objects included with the material

[1] *Archaeologia*, lxxxix (1943), 68, 74, figs. 19, 24.

[2] H. Shetelig, 'Smykker av jet i norske vikinge-funn', *Bergens Museums Årbok* (1944).

[3] *Ibid.* fig. 10, 11.

[4] Arbman (1943), Taf. 97. 28, 29.

[5] Shetelig (1944), fig. 3. The coiled snake motif occurs in Scandinavia perhaps as early as the Migration Period, B. Ambrosiani, 'Ett 500-talsfynd från Simtuna', *Fornvännen* (1955), 261, fig. 2; see also B. Almgren, *Bronsnycklar och Djurornamentik* (Uppsala, 1955), pl. 29 *a*.

[6] *Archaeologia*, lxxvii (1928), 79, fig. 1 *c*.

[7] In Norwich Castle Museum.

recovered in 1882, and it is clear that the manufacture of amber and glass beads was carried out in the vicinity. Much unworked amber, together with rough-outs and spoilt and finished beads of this material, as well as glass slag, glass 'drops', unperforated or imperfectly pierced and finished glass beads in fragmentary condition point to this conclusion.

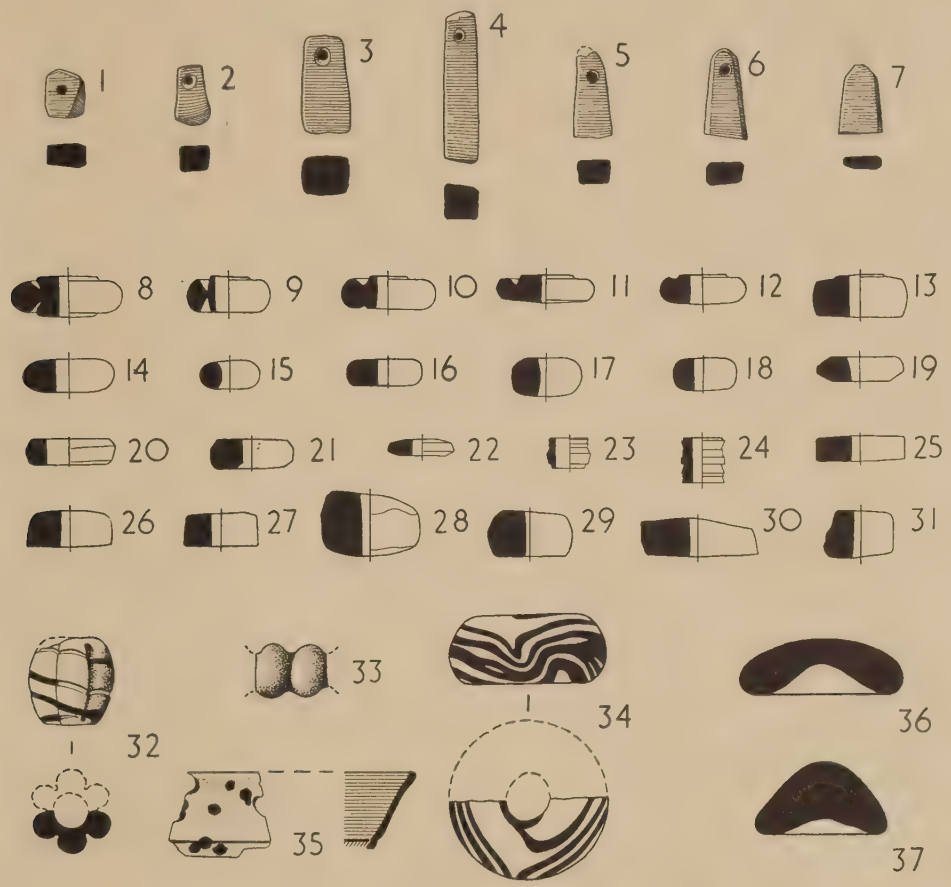


FIG. 22. Beads of amber (1–31) and glass (32–34); fragment of glass vessel (35); glass linen-smoothers (36–37) (32–34, $\frac{1}{1}$; 1–31, 35, $\frac{1}{2}$; 36–37, $\frac{1}{4}$).

Amber beads (fig. 22). The finished beads are of two forms; type 1, ideally of truncated-pyramidal shape but showing considerable variation (1–7), type 2, cylindrical or disc-shaped of varying thickness and cross-section (8–31). The method of manufacture appears to have been the same: to cut the raw amber roughly to shape, to bore the perforation (during which process many of the beads appear to have been broken and discarded) and finally to grind or polish the surface to a smooth finish, which in the case of beads of type 2 must have been done on a wheel. The edges of beads of type 1 are often bevelled or slightly rounded. In the case of beads of type 2, finishing evidently involved the deep grooving seen on 8–11, while the rare barrel-shaped beads, 23–24, are also grooved and faceted by wheel cutting. Nos. 28–31 remain untrimmed and are probably unfinished.

Amber beads of type 1 are known during Viking times in Scandinavia[1] and likewise beads of

[1] Arbman (1943), Taf. 119. 2.

type 2 in the same material,[1] but the wheel-cut grooving of the York examples appears to be uncommon.[2]

Glass beads (fig. 22). These call for little comment as they are, although great in number, for the most part in extremely fragmentary condition. All seem to be of annular form, ranging in diameter from 0·3 to 0·5 in., with a single example, 0·9 in. diameter, of larger size; they are pale milky-blue, light and dark blue and green in colour. The only exceptional examples are, one of melon shape in pale blue glass, and a portion of a segmented bead with gold-foil inlay (33), both recognized Viking types in Scandinavia.[3] Here also should be included opaque beads sometimes described as of glass 'frit', in colour mostly white, grey, or brown. They are annular in shape, mostly 0·4–0·6 in. diameter, with a larger size (34) in blue glass with olive-coloured swirls. The only other example worth illustrating (32) is of melon shape, in buff-coloured glass with pale blue threads.

Mention may now conveniently be made of the single fragment of a Viking Age glass vessel from York (fig. 22. 35 from Clifford Street). Professor Holger Arbman has examined the piece and has kindly provided the following report:

'The fragment belongs to a beaker of light greenish glass with side walls about 0·2 cm. thick, but of the body there remains only a narrow band on the lower edge. The rim, 2·2 cm. deep, is fused on to the body, it is golden-brown in colour and of the same thickness as the side walls of the body. The junction between rim and body is to be seen as a constriction externally and as a slight bulge on the inside; the edge of the rim is slightly thickened. The surface is pitted with a number of dark spots, due to a glass disease.

'This type of glass may belong either to the Carolingian, or perhaps the Ottonian, period. The technique used, in the fusing-on of the rim, is known from some glasses made in western Europe, in my opinion in the region of the Moselle and further north, during the ninth and perhaps also the tenth centuries. Very few such vessels survive, most of them in Scandinavian graves and it is uncertain how to date the continental material. There are only three forms of beaker known to have a fused-on rim: the Trichterbecher, the thread-ornamented globular beaker and the small egg-shaped beaker with a deep, upstanding, coloured rim. If I have estimated the profile correctly, the York fragment most probably belongs to a Trichterbecher, cf. Arbman (1943), Taf. 189. 1–2; Taf. 190–2; even so, it differs from other known examples. In these, the rim is always of a darker colour, mostly blue, and never as deep as the rim of the York piece. This is the case with the beakers from Birka, Ås-Husby, Hedeby and Dorestat. But there is from grave 124 at Birka a small fragment, *ibid.* Taf. 192. 4, of a two-coloured beaker with almost exactly the same colouring as the fragment from York, a greenish bowl and golden-brown rim. When I published this piece I was unable to state the form of the beaker to which it belonged but thought it must have been something like the small vessel at Birka, grave 644, *ibid.* Taf. 189. 4. But there is the difficulty that the side walls are not so thin, being of the same thickness as the York fragment. Thus I think—but of course I am not quite sure—that the York piece belongs to a Trichterbecher and the date I can only suggest from the fused-on rim to be the ninth or perhaps the tenth century.'

A number of bun-shaped objects of glass, concave on the underside, frequently burnt and semi-vitrified at the surface, which are conveniently described as linen-smoothers, have occurred from York. Apart from isolated finds, several were found at Clifford Street and representative examples are shown in section, fig. 22. 36, 37. Although well attested in Viking contexts[4] I have

[1] *Ibid.* Taf. 115. 16–28. Cf. Jankuhn (1943), Abb. 39.

[2] I have noted only one instance of this, in the material from the town site at Birka (unpublished: S.H.M.Stockholm).

[3] For melon beads see Arbman (1943), Taf. 120–3; for segmented beads with foil inlay, *ibid.* Taf. 117. 9, etc. The segmented bead from York has kindly been examined by Professor Arbman, who writes: 'Some details of the constriction of the ends and centre look very like those of our gold foil beads of the 10th century; those of the 9th were often thicker and generally more regular. It is, however, not possible from this to date the bead from York with any certainty to the 10th century.'

[4] See Rygh (1885), fig. 446.

seen an example from the site of Rievaulx Abbey, Yorks., which is presumably not earlier than *c.* 1128, the date of foundation.

OBJECTS OF STONE

Hones (fig. 23). A considerable number of hones have been found in York[1] on sites productive of material of Viking or early medieval date, but only those from Clifford Street have been recovered in circumstances which suggest direct association with other finds of this period. Petrographical examination of some nineteen examples from the city has been carried out at the

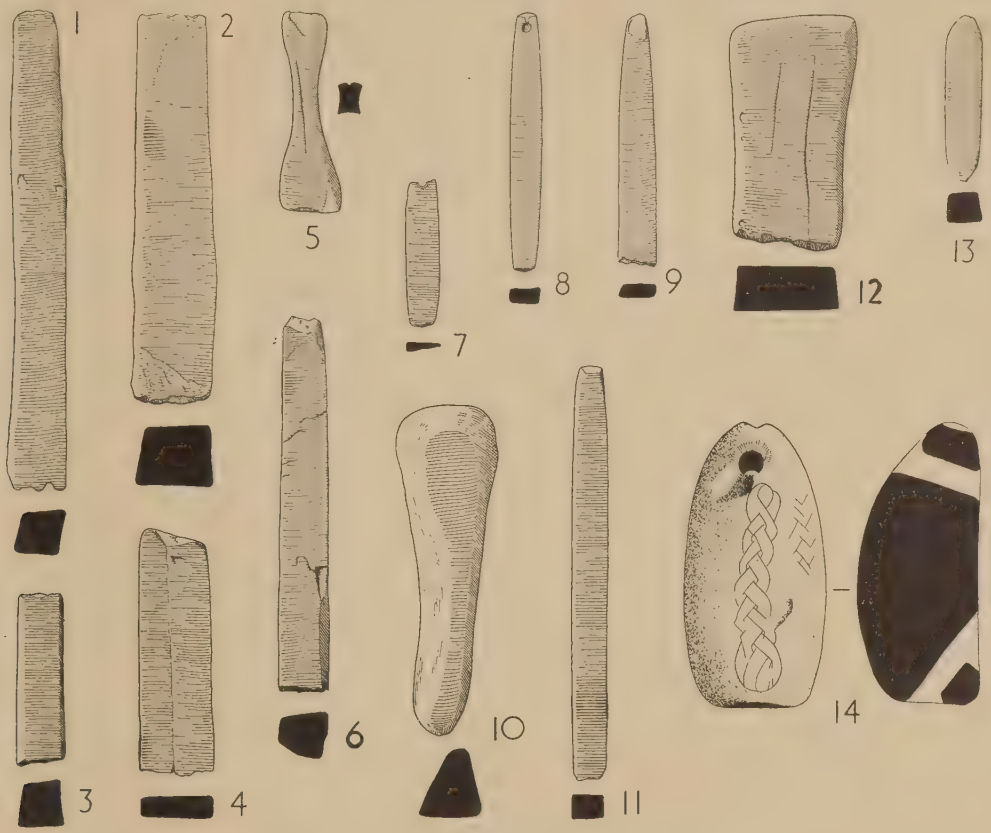


FIG. 23. Whetstones and stone net-sinker (⅓).

Geological Survey and Museum, London, by Mrs. J. E. Morey and Professor K. C. Dunham; a full report of their findings has been published,[2] a summary of which they have kindly provided for inclusion here.

Report on Hones from York by Mrs. J. E. Morey and Professor K. C. Dunham.

The Metamorphic Rocks. Two distinct groups of fine grained metamorphic rocks, types normally associated with regional metamorphism, occur among the hones.

1. *Fine grained quartz mica granulite* grey in colour and showing distinct lamination in the hand specimen, together with a measure of metamorphic sheen, without being schistose. The rock is composed of angular quartz grains, mainly between 50 and 100 microns in diameter,

[1] An initial survey of the material was undertaken by Mr. L. R. A. Grove, sometime curator of the York Castle Museum. Unable for lack of time to publish his results, Mr. Grove has generously passed his notes and drawings to the writer.

[2] *Proc. Yorks. Geol. Soc.* xxix (1953), 141–8.

fresh, sharp plates of muscovite and subordinate chlorite and green biotite in unorientated chains round the quartz, and penetrating it. Some magnetite, and in several examples a little calcite complete the assemblage of main constituents; minor quantities of tourmaline, zircon, epidote, and apatite also occur.

Hones of this group occur from Goodramgate (nos. 1, 2), Coppergate (nos. 3, 4) and Pavement (no. 5), together with two without exact provenance and not illustrated.

Two hones of similar type, collected by Miss K. M. Kenyon at the Jewry Wall site, Leicester, have previously been described.[1] These were classed by Mr. G. C. Dunning with his schist hones, from which it is presumed that many of the widespread hones listed by him are of similar type; although these have not, to our knowledge been checked by microscopical examination in every case.

In Mr. Dunning's earlier contribution,[2] a suggestion by Dr. K. P. Oakley was quoted that north-west France is a possible source for these fine-grained metamorphic rocks. Also quoted were the results of a petrographical examination by Professor Michel-Lévy, who concludes that 'there is no evidence against the Armorican origin of the fine-grained mica schists' submitted to him. Positive evidence for matching rocks from Brittany was, nevertheless, not produced. A search of the rocks from this area in the Foreign Sliced Rock collection of the Geological Survey and Museum has failed to produce a matching type, and Dr. W. Campbell Smith who has kindly examined the collections of the British Museum (Natural History) on our behalf for such a type, reports that he has been unable to find one among French rocks. Inquiries made in France were equally unsuccessful.

Meanwhile rocks of a similar nature from Anglesey were noticed among the Geological Survey collections, and a more satisfactory match was found with material from Scotland.[3]

Among the Dalradian rocks of the Strathspey, Gaick, and Forest of Atholl district of Aberdeen, described by G. Barrow,[4] there occurs a group of fine laminated granulites called by him the Honestone or Parallel Banded Group. Barrow states that these rocks were formerly used as honestones by farmers and shepherds.[5] A rock in the Scottish Sliced Rock collection from Alltna-Broon, Aberdeenshire (S. 8523. A and B) closely resembles the granulite of the hones previously referred to; although the rock contains a little more biotite (the quantity of this mineral varies among the hones), and is somewhat iron stained, the resemblance is otherwise good.

2. *Metamorphosed Siltstone.* This rock consists of well-sorted, angular quartz grains averaging 20 microns in diameter. Sharp micaceous minerals penetrate the quartz, and black iron oxide granules are scattered throughout the rock.

Hones of this group occur from Clifford Street (no. 6) and from Coppergate (no. 7).

The metamorphic grade is similar to that of other fine-grained granulites. A source in Aberdeenshire is again possible as indicated by a specimen from Little Glen Burn, Upper Mochty (S. 2807).

Argillaceous and Siliceous Sediments of Lower Palaeozoic Type

The second main group of rocks represented among the hones comprises fine-grained siltstones and greywacke sandstones. Since the hones in this group differ from one another it is unlikely that they could be derived from a single working or from a small working area.

Hones of this group occur from Clifford Street (nos. 8, 9), from Goodramgate (no. 10), and from Pavement (no. 11), together with one, not illustrated, without precise provenance.

The rock types in this group are a chloritic silty sandstone (no. 10), an indurated siltstone (no. 11), a silty mudstone (no. 8), and a phyllite (no. 9), all of which are common among the Lower Palaeozoic rocks of the Southern Uplands of Scotland, the Lake District, and central and northern

[1] K. Kenyon, *Jewry Wall Site, Leicester* (Soc. Antiq. Research Report. no. xv), 230.

[2] *Proc. Isle of Wight N.H. and A. Soc.* ii (1938), 682.

[3] The aid of Dr. A. G. MacGregor of the Edinburgh Office of the Geological Survey is gratefully acknowledged in this connexion.

[4] In 'Geology of Upper Strathspey, Gaick and the Forest of Atholl. Explanation of Sheet 64', *Mem. Geol. Survey*, 1913, p. 17.

[5] 'The Moine Gneisses of the East-Central Highlands, and their position in the Highland Sequence', G. Barrow, *Quart. Journ. Geol. Soc.* lx (1904), 435.

Wales. No. 10, for example, can be matched with specimens from Dumfries (S. 13399) Wigtown (S. 22202), and Berwick (S. 24400), while the specimen not illustrated is similar to a mudstone from Watley Gill, Westmorland (E. 1465). No one of these rocks is a distinctive type and so a provenance from these particular localities is not suggested. Also, these types can be found in the glacial drift of Yorkshire, carried there from sources within the Southern Uplands and Lake District. Therefore in view of the diversity of types it seems most probable that they were picked up locally from the superficial formations (glacial drift or alluvium) for making into hones.

Sediments of the Millstone Grit Type. There are two hones made from rocks familiar in the Millstone Grit formation of West Yorkshire, one (no. 12) from Clifford Street and one (no. 13) from Pavement. The former can be matched with a sandstone from the Marchup Grit,[1] exposed in an old quarry at Crag Plantation, north-west of Maddock Stones (E. 22030). Again it is not insisted that this is the exact source, but there can be little doubt about the general area of derivation of this rock.

Conclusion. All the hones described have one petrographical feature in common: they consist of angular, generally small grains of quartz set in a softer matrix, which may be of micas or clay minerals. Evidently experience had long established that such rocks made the most serviceable hones. As Mr. Dunning (*op. cit.*) had suggested, there was a trade in metamorphic schist and granulite hones, and on petrographical evidence alone the source of these could have been in north-east Scotland. The remaining honestones in this collection could well have been of local origin.[2]

Net-sinker. A stone net-sinker was found at Clifford Street (fig. 23. 14). It is obliquely perforated through the thickness at both ends and is engraved with an interlace, and the beginning of another, on the back.

POTTERY

At the time this study of the York finds was in preparation little pottery of late Saxon or early medieval character could be recognized from the city. The recent excavation carried out by the Ministry of Works on a new post office site in Hungate, however, has now provided a body of stratified material which should do much to clarify the local pottery sequence, and nothing really useful can be attempted until the results of this work are available. I have, nevertheless, considered it worth while to include here my original account of the pottery then recognized to complete as far as possible this description of the city finds preserved in the Yorkshire Museum. In doing so, I must acknowledge several profitable discussions concerning the material with Mr. G. C. Dunning and Mr. E. M. Jope.

Fig. 24. 1. Upper part of cooking-pot, with everted rim and band of roller-stamped ornament above the shoulder. Laminated grey clay with fine-crushed white shell; buff surface speckled with shell, purple tones outside below neck, black and sooty outside rim. From Coppergate.

This is a typical example of the St. Neots class of pottery[3] of pre-Conquest origin, but the present example is probably an import of the early Norman period. Plain rims of this section occur at St. Neots itself (perhaps ninth to tenth century),[4] at Great Paxton, Hunts. (probably mid-eleventh century),[5] and at Bedford as well as minor sites in the Beds.-Cambs.-Hunts. region. Roller-stamped patterns in some variety are characteristic of the St. Neots class of pottery and

[1] The Faunal Division of the Millstone Grit Series of Rombalds Moor, J. V. Stephens, W. Edwards, C. J. Stubblefield, and G. H. Mitchell, *Proc. Yorks. Geol. Soc.* xxiv (1942), 344.

[2] *Acknowledgements.* The slices used in this investigation, many of them of difficult subjects, were made by Mr. G. H. Collins. Slice numbers, in brackets, prefixed by 'E' refer to the English, and those prefixed by 'S' to the Scottish Sliced Rock Collection of the Geological Survey.

[3] Mr. J. G. Hurst's study of St. Neots ware has recently appeared, *Proc. Cambs. Antiq. Soc.* xlix (1956), 43–70. I have, however, retained my original references although these may now be augmented by Mr. Hurst's paper.

[4] *Ibid.* xxxiii (1933), 148, pl. 11. 2.

[5] *Ibid.* xxxv (1935), 101, fig. 3. 7–9.

occur on rims or sides of cooking-pots, bowls, and jugs, typical examples (although of the Norman period) occurring at Alstoe Mount, Rutland, and at Stamford Castle.[1] The complete York pot (as restored) would be globular in shape with a convex base, as on examples cited above.

Fig. 24. 1A. Complete cooking-pot, wheel-thrown, with thickened, everted rim above a slight shoulder. Squat body with flat, rather uneven base. Open-textured grey body containing crushed shell, external surfaces grey to warm yellowish-buff, the inside darkened in use. From York (Sheffield Museum; Inv. No. J. 93.1034).

In form this vessel approximates to regular medieval cooking-pottery of the twelfth to thirteenth centuries and while the use of crushed shell in the paste suggests survival of early potting traditions, it has been shown that the presence of a shell-filled fabric in the thirteenth century elsewhere is not necessarily to be thus explained.[2] The pot bears no resemblance, either in form or fabric, to the little pottery of the twelfth century from Yorkshire with which I am acquainted nor, for that matter, with vessels in sandy fabric which begin to appear in the following century. For all that, however, a twelfth-century date for this cooking-pot appears most likely.

Fig. 24. 2. Upper part of a bowl or skillet with socket for a wooden handle. Drab, whitish ware, close-textured, and fired very hard; smooth surface with yellowish tones. The rim is flanged and bent down level; the socket was made separately and then pressed into position against the outside of the flange.

Skillets also occur in pottery of late Saxon type. Examples, datable probably a century or less before the Conquest, are known from Downing Street, Cambridge (decorated with roller-stamping) and from Bedford (plain). Bowls with flanged rims of this section are typical of the east Midlands on sites of the Norman period; there are many examples from Alstoe Mount and Stamford Castle,[3] also socketed skillets from Stamford[4] and Glaston, Rutland. The drab, whitish ware of the York skillet is particularly characteristic of this type of pottery in the Leicester–Alstoe Mount–Stamford region.

Fig. 24. 3. Upper part of skillet with tubular socket for a wooden handle. Hard, close-textured, drab grey ware—almost stoneware in quality—yellow-toned at the surface, which is hand-smoothed but harsh and lumpy in finish. From Goodramgate; the socket of a similar skillet was found at Clifford Street.

This simple form of skillet is in marked contrast with those of late Saxon origin described above; the socket projects upwards at an angle above the simple rim, whereas the East Anglian examples have shorter sockets, nearly always level with the flanged rim. These two York skillets, in fact, correspond both in ware and character with a number of skillets found at several sites in the Rhineland, Holland, and north Germany, the earliest dating from about the ninth century[5] and lasting without much change, at least in Holland, into the tenth or eleventh century;[6] they are, therefore, almost certainly imports from Holland in the Viking Age.

Fig. 24. 4–7. Fragments of large vessels with strap-handles (certainly multiple in the case of no. 4) and rolled or everted rim, bearing thumbed strips on the body (nos. 6, 7 from Parliament Street).

Such vessels have been found in great quantity at Thetford, Norfolk, and appear at Norwich (immediately pre-Conquest) and at Stamford Castle (during the Norman period).[7]

Fig. 24. 8. Small round-bottomed vessel with pinched lip, hand-made in hard grey ware, perhaps a crucible. From Coppergate.

Fig. 24. 9. Small pot, crudely made by hand, with grey, lumpy surface. From Coppergate.

Fig. 24. 10, 11. Cresset lamps, with pointed base to stick in a hole in table or shelf. From Clifford Street.[8]

[1] *Antiq. J.* xvi (1936), 404, 410, figs. 3, 5.

[2] E. M. Jope, 'Some recent finds of medieval pottery', *Oxoniensia*, vii (1942), 73–74.

[3] *Antiq. J.* xvi (1936), 406, 410, figs. 4–6.

[4] *Ibid.* fig. 6. 14.

[5] At Hedeby, H. Jankuhn, *Haithabu* (1938), 139, Afb. 143*a*; Dorestad, *Oudheid. Mededeel.* N.R. xi, 74, fig. 57. 12.

[6] *Ibid.* N.R. xiii, 34, Taf. iv. 25–26.

[7] *Antiq. J.* xvi (1936), 410, fig. 5. 9.

[8] Another lamp of this form from York is in Sheffield Museum (Inv. no. J. 93. 1084).

Fig. 24. 12–16. Cresset lamps with hollow, pedestal foot. No. 12 (from Clifford Street) is of coarse dark-buff clay, containing crushed shell; the remainder (no. 13, Goodramgate; no. 14,

Fig. 24. Pottery ($\frac{1}{4}$).

Pavement; no. 15, Clifford Street; no. 16, Parliament Street) are of hard grey clay with harsh surfaces and usually show signs of burning on the inside of the bowl.

Both varieties of cresset lamp have been found in large numbers at Thetford, in the eleventh

century at Northampton[1] and Norwich, and in the twelfth century at Leicester;[2] they persisted well into the Middle Ages.[3]

Fig. 24. 17. Hand-made; hard reddish-brown clay with uneven, lumpy surface, irregular lattice-arrangement of notched lines, evidently produced with the teeth of a comb, at one place on the outside. This appears to be the bowl of a lamp and was found in Skeldergate, it is said together with a St. Peter penny;[4] if thus associated, the lamp is perhaps early tenth century in date.[5]

Fig 24. 18. Boat-shaped crucible, the rim pinched in at the sides to form a lip for pouring. Hard, drab whitish clay, buff-brown surfaces burnt dark in places, shallow grooves at the greatest diameter. Small spots of thin yellow glaze occur on the outside beneath the lip. Said to have been found on Bishophill in 1882 and to have contained 'some hundreds of silver pennies of Edward the Confessor' (but see p. 69).

A smaller crucible of this form was found at St. Mary Hill, London, with a hoard of coins of Edward the Confessor and William I[6] and another in a Norman pit at Old Sarum, Wilts.[7]

Fig. 24. 19. Fragment of rim of pitcher with tubular spout, in fine hard buff ware, partially covered with thin yellow glaze. From site of Yorkshire Museum (Tempest Anderson Hall).

Fig. 24. 20. Fragment of pitcher of similar type, in hard, whitish ware, blue-grey at the surface. Patches of thin yellow glaze on outside of neck. The base of the strap-handle terminates in two leaf-shaped thumb impressions.

A type of glazed pitcher, provided with tubular spout set close to the rim and strap handles occurs at the late Saxon town of Thetford, Norfolk,[8] but is found in post-Conquest contexts as well, as at Stamford Castle[9] and Leicester.[10] The York fragments are probably post-Conquest in date.

Fig. 24. 21. Rim fragment, vertical neck and moulded lip. Fine, hard whitish ware, buff-brown inside and on shoulder, grey-toned on outside of neck. From site of Yorkshire Museum (Tempest Anderson Hall).

Insufficient remains to indicate whether this sherd is part of a pitcher, of the type with spout and strap handles described above, or of a jar derived from, and contemporary with, such pitchers as at Leicester.[11]

Loom weights. A number of clay loom-weights, of both annular and bun-shaped type, from the Castle Yard, may perhaps conveniently be mentioned here.[12]

ADDENDA: RECENT FINDS

Pavement (fig. 25). In 1951 a number of finds which can mostly be referred to the period covered by this paper were made during excavations in Pavement, about midway between Shambles and Parliament Street, including two pennies of Edgar, already published.[13] The material cannot be regarded as a closed find, however, although a late tenth-century date would not be inconsistent with the character of some of the objects; apart from the uncertain conditions of discovery, two potsherds collected at the same time are unlikely to be earlier than the twelfth century.

1. Irish-type bronze pin, lacking ring attachment of the head. The main faces of the head

[1] *Reports. Ass. Architect. Soc.* xvi. 243, pl. 1. 6–7.

[2] K. Kenyon, *Jewry Wall Site, Leicester* (Soc. Antiq. Research Report, no. xv), 228, fig. 61. 4–6.

[3] *Medieval Catalogue* (London Museum Catalogues: no. 7, 1940), 175, fig. 54.

[4] *Yorkshire Museum: Handbook to the Antiquities* (1891), 161.

[5] For the dating of St. Peter pence see R. H. M. Dolley, *Brit. Num. J.* xxviii (1956), 14–15.

[6] *V.C.H. London*, i. 159, fig. 15. See also *Oxoniensia*, xvii/xviii (1952–3), 96–97.

[7] *Antiq. J.* xv (1935), 190.

[8] G. C. Dunning in *D.A.B.* p. 229.

[9] *Antiq. J.* xvi (1936), 410, fig. 6. 16.

[10] Kenyon, *op. cit.* 228, fig. 61. 1.

[11] *Ibid.* 226, fig. 59. 5, 6.

[12] *Yorks. Archaeol. J.* xxxiv (1939), 113. See also *Antiq. J.* xix (1939), 89.

[13] *Num. Chron.* 6th ser. xii (1952), 118.

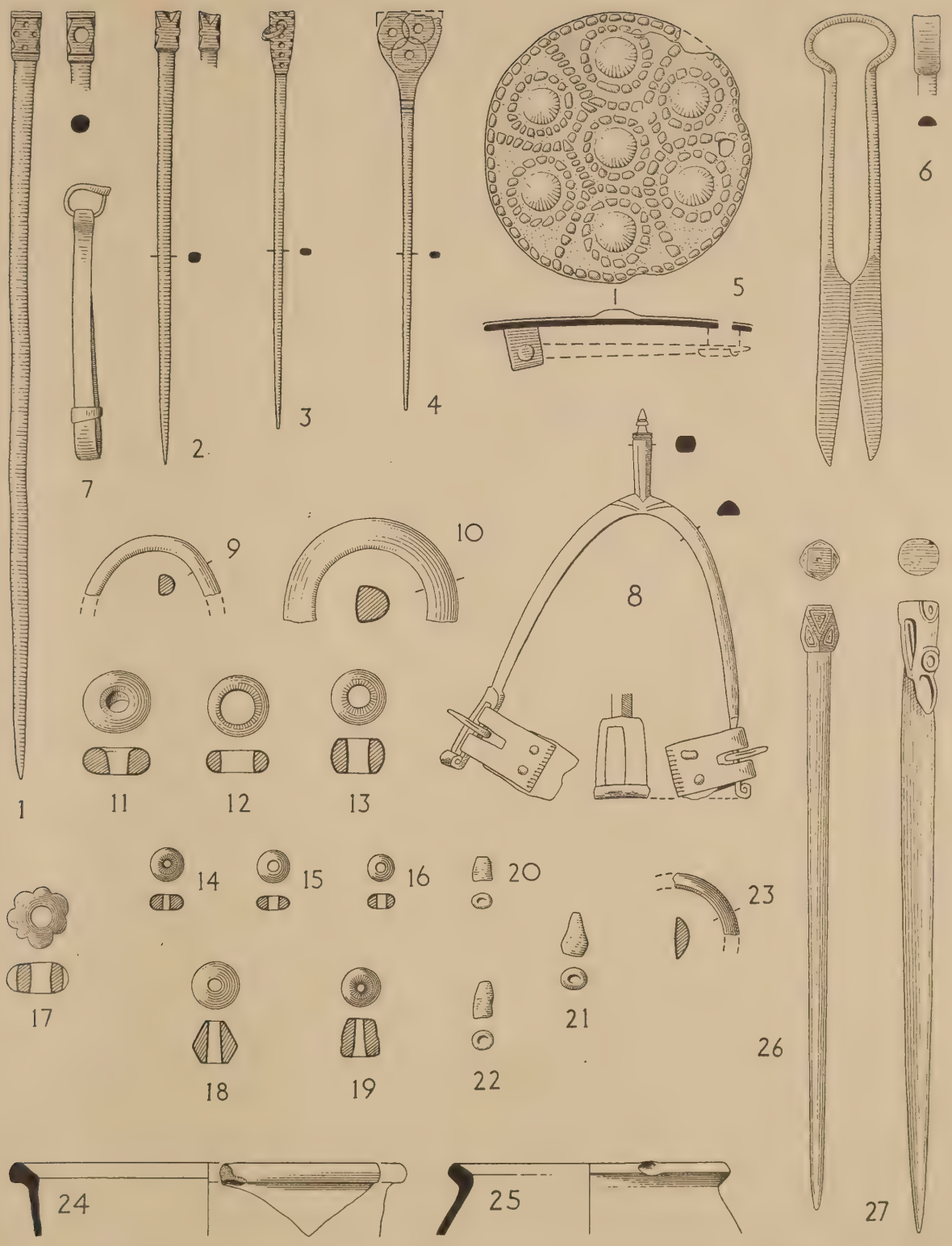


FIG. 25. Finds from Pavement, 1–25; Bedern, 26; Market Street, 27 ($\frac{1}{1}$; except 6, 8 ($\frac{1}{2}$), 24, 25 ($\frac{1}{4}$).

have lozenge-shaped panels bearing four dimples with transverse moulding above and below. Length 5·35 in.

2. Bronze pin, rectangular head, V notched at the sides. Length 3·1 in.
3. Bronze pin, flat expanding head with incised groove at junction with stem. The edges have a series of V-shaped notches and there are a number of dimples down the centre of each face. The head is perforated at its broadest part, through which is passed a small bronze ring, of ribbon section, with overlapping ends. Length 2·95 in.
4. Bronze pin of late Saxon type. Flat, shield-shaped head, the upper edge damaged but originally squared off, separated from the stem by a pair of transverse grooves. The head has three perforations, enclosed on each face by incised, overlapping circles. Length 2·75 in.
5. Disc brooch, golden bronze with lead backing, crudely ornamented by repoussé bosses with beaded borders, set within panels separated by beading which also forms a frame to the whole design. The hinge attachment for the pin remains on the reverse but pin and catch-plate are now missing. Diam. 1·85 in.
6. Iron shears. Length 6·2 in.
7. Iron tweezers; looped head with small penannular ring for attachment and small sliding sleeve to hold extremities of implement together. Length 1·75 in.
8. Iron prick spur, the surface flashed over with a tin-lead alloy.[1] Angular, slightly curved arms of D section, in the same plane with which is a tapered point with encircling grooves at the broadest end and projecting moulded spike. On one face there is a simple engraved decoration of lines at the junction of arms and point. The arms terminate in rectangular loops, turned over at the bottom, with side-pieces of unequal width; to the side-pieces are attached buckles, the pins of which rotate on the narrower side-piece of the loops. The buckles, cut from sheet metal, are bent over to enclose the ends of an original leather strap; there is a slot to accommodate the pin at one end and the other end is crimped on to the strap which is secured in position by a pair of rivets. Length 5·3 in.

A large number of beads of translucent glass or opaque 'frit' were found, mostly in fragmentary condition: the estimated totals of the various types can be only approximate. The lobed form (17) is plentiful, the beads frequently distorted in manufacture and ranging in diameter from 0·3 to 0·45 in.; about 40 are of green glass and a similar number of black 'frit' with a metallic surface sheen. Of the annular form, about 44 are of green glass (12, 14) and 67 in black 'frit', 0·25 to 0·4 in. in diameter; there are 55 in yellow glass (11, 15, 16), 0·2 to 0·6 in. diameter, also a single bead (13) of orange-coloured paste. A type of small, ill formed tubular bead (total 20) occurs mostly in green glass (21, 22) with a few in yellow glass (20) or black 'frit'. Ring-shaped beads—some of which may indeed actually be finger rings—number 10, five in yellow glass (9), one in green glass, and the rest in black 'frit'; the diameter is rarely obtainable. There is a single example of a bi-conical (18) and cylindrical (19) bead, both in black 'frit'; also a single large annular bead of amber (10) and a few chips of the same material.

A fragment of jet (23) is probably part of a finger ring. A small bronze ring, 0·65 in. external diameter and 0·1 in. width, of thin ribbon section, is not illustrated.

The pottery comprises only two rim sherds. No. 24 is of hard, close-textured, gritted whitish-buff clay, with buff or purple-toned surfaces which are smoothed yet harsh to the touch; on the rim is a scar, possibly where a handle has been attached, but this is quite uncertain. In rim form and fabric, this sherd resembles a series of flanged dishes of the twelfth century from Knaresborough Castle, West Riding Yorks.[2] No. 25 is of hard, well-fired grey clay with bluish-grey surfaces; a single finger impression, probably accidental, occurs on the rim. In appearance it resembles cooking pottery of the so-called Thetford group of pre-Conquest origin,[3] but the present piece is unlikely to be earlier than the late eleventh or early twelfth century.

[1] See E. M. Jope, *Oxoniensia*, xxi (1956), 35–42.
[2] *Antiq. J.* xxxiii (1953), 211–12, fig. 1. 17, 18.
[3] *Proc. Cambs. Antiq. Soc.* l (1957), 42–60.

Bedern (fig. 25. 26). Bone pin; faceted head with roughly incised triangle, enclosing a single dimple, to each face. Single dimple on flat top.

No. 23, Market Street (fig. 25. 27). Bone pin; carved beast-head.

Fishergate. A gold ring with zoomorphic ornament, of the ninth or early tenth century, was found some years ago on the site of the Glass Works and has recently been presented to the Yorkshire Museum. Publication by Mr. R. L. S. Bruce-Mitford, forthcoming.

St. Mary's Abbey. Recent excavations on the site of St. Mary's Abbey by Mr. G. F. Willmot, F.S.A. have produced late Saxon material, including a pin of gilded bronze with zoomorphic ornamented head. Publication forthcoming.

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The Building of Theobalds, 1564–1585[1]

By SIR JOHN SUMMERSON, C.B.E., F.B.A., F.S.A.

[*Read 2nd December 1954*]

I

SIR WILLIAM CECIL bought the manor of Theobalds in 1564[2] and we are told that he did so in order to provide an estate for his younger son, Robert,[3] who had been born probably in the previous year. There will have been other considerations and Cecil's choice of situation is interesting. Theobalds lies just off the main road from London to Ware, the road he would take on his journeys to and from his principal seat at Stamford. It lies, moreover, in a neighbourhood studded with royal houses—Enfield (3 m.), Hertford Castle (8 m.), Hatfield (9¼ m.), and Havering-at-Bower (10¾ m.). In addition, Cecil's old friend Sir Thomas Smith was established at Hill Hall, Theydon Mount (7½ m.), and his father-in-law, Anthony Cooke, at Gidea Hall (12 m.). Finally, at Gorhambury (15 m.), his brother-in-law Sir Nicholas Bacon had started building operations in March 1563.[4] It may or may not have been chance that Sir Thomas Heneage obtained the reversion of Copthall[5] (6 m.) and began building there in the same year that Cecil acquired Theobalds.

At Theobalds, Cecil found a moated manor-house.[6] There is a plan of it in the Hatfield collection[7] and its site is probably indicated by the remains of a moat plotted on the Ordnance Survey a short way south-south-west of Theobalds Park Farm. The plan (pl. XXIII, *a*) shows a very small courtyard entirely surrounded by buildings which include, at the south-west corner, a great parlour and stair, more precisely drawn than the rest and perhaps representing an addition by Cecil. It must have been at this house that he entertained Queen Elizabeth on 27th July 1564.[8] He will hardly yet have had time to build that great parlour (no doubt with a chamber over it—hence the stair) but it is, in any case, evident that the queen merely called on this occasion and spent the night at her own house at Enfield. She certainly stayed with Cecil two

[1] This paper deals with the subject on the basis of documents combined with such limited information as the remains on the site afford. The site has never been systematically surveyed for archaeological purposes, and so nearly complete has been the destruction of the old house that it is extremely doubtful if a survey would add substantially to our knowledge. On the other hand, the publication of accurate records of the buildings now on the site together with the remains which they incorporate is much to be desired.

I wish to express my indebtedness to our fellow the marquis of Salisbury for allowing me access to the Cecil papers at Hatfield and for permission to reproduce some of the drawings relating to Theobalds. I am also indebted to the town clerk of Cheshunt for facilities to examine the buildings in Cedar Park, to Mrs. Lane for similar facilities at Old Palace House; to the Astronomer Royal for permission to inspect the staircase now at Herstmonceux; to Mr. J. Edwards, librarian of Cheshunt Public Library, for his interest and help and for the loan of the Theobalds Park Catalogue of 1911; and to Professor Conyers Read for commenting on the paper in draft.

[2] *V.C.H. Herts.* iii, 447. In a memorandum by Burghley, Hatfield MSS., vol. 143, 101, it is stated that he paid £1,600 for the fee farm, besides other sums to buy out other interests.

[3] F. Peck, *Desid. Cur.* i, 25.

[4] J. C. Rogers, *The Manor and Houses of Gorhambury* [1934].

[5] Cal. S.P. Dom. (1547–80), p. 243.

[6] D. Lysons, *Env. of Lond.* iv, 31.

[7] Hatfield MSS. vol. 143, 24.

[8] J. Nichols, *Progresses of Q. Eliz.* (1823), i, 149.

years later at Stamford,[1] but it was to be some years before he had a house at Theobalds capable of accommodating the queen and her court. In fact, the first residential visit did not take place till 1571[2] and was then apparently for a night or two only. Meanwhile, Cecil would doubtless use the old manor-house for occasional residence while his new house was being built.

For this new house, begun in 1564, Cecil chose a site some 500 yards to the west of the London road and only 90 yards south of the branch road to St. Albans—considerably more accessible than the old house. He tells us that 'it was begun by me with a mean measure but encreast by occasion of her Majesty's often coming'.[3] So far as we know, her majesty did not come at all, to stay, till 1571, so that everything built before and for some years after that date should, strictly speaking, qualify for the epithet 'mean'. But Cecil was writing in 1585 and in retrospect his twenty years of building at Theobalds would certainly seem inextricably involved with the incidence of royal visits. It should be observed that he does not imply here that a house on 'a mean measure' was ever completed and I much doubt if it ever was. We shall see that within a very few years after 1564 Cecil must have committed himself to important revisions. By the queen's first visit in 1571 Theobalds was far from mean. It was moreover, increasing in every direction; and each subsequent visit will have afforded the spectacle of further building achievements. It was no exaggeration of Burghley's to affirm that Theobalds 'encreast by occasion of her Majesty's often coming'.

Concerning the plan and appearance of the 'mean' beginnings of Theobalds on the present site we can gather only a few indirect hints. There is at Hatfield a plan[4] of a courtyard house (pl. XXIII, *b*) which Cecil has endorsed in one place 'platt of Thebalds New' and in another 'A platt for to have reformd y^e^ old house'. The contradiction is not as baffling as it seems. This is obviously Theobalds 'new' as distinct from the moated house; the width of the courtyard attaches it firmly to the new site and was in fact retained in the final rebuilding. But it is also the *old* house 'reformed' in the sense that it is a project for altering or revising the *new* building, which was eventually, as we shall see, to be entirely reconstructed, thus becoming in later retrospect the *old* house. Indeed there is a sketch-plan by Cecil[5] in which the first court, then in process of rebuilding, is marked 'y^e^ old house'.

This plan of an unexecuted revision shows a courtyard 86 ft. by 90 ft. surrounded by buildings varying from about 19 ft. to 28 ft. in thickness. The hall is on the south, opposite the entrance on the north. To the east is an irregular service court. If this is a 'reformed' version, the first intentions for Theobalds were certainly fairly mean. The reforms, whatever they were, were not adopted so the plan helps us very little. We meet this old courtyard again, however, in another plan,[6] undated, in the Hatfield muniments (pl. XXIV, *a*). Here it is shown 86 ft. square, with buildings 26 ft. thick on north, south, and west and on the east a much thicker block of which there was no hint in the 'reformed' plan. This thick block has two short wings extending at right

[1] J. Nichols, *Progresses of Q. Eliz.* (1823), i, 205.
[2] *Ibid.* i, 291.
[3] *Ibid.* i, 205, n. 1.
[4] Hatfield MSS. vol. 143, 29 and 30.
[5] *Ibid.* 143, 40.
[6] *Ibid.* 143, 27 and 28.

angles eastwards and service buildings extending eastwards again from these but canted a little to the south in a way which suggests a site restriction. The purpose and dating of this plan are complicated by the fact that a part has been neatly cut away and backed with paper, while a flap has been fitted, on which is drawn a completely regular and fully enclosed second court, with base court and lateral service courts beyond—in fact, an adumbration of the whole ultimate layout (pl. XXIV, *b*). The under plan and the flap are on different sorts of paper and it seems that this document has been worked on at different times, though by the same hand. Whatever the exact purpose of the plan and its attachment it appears to represent two successive stages in the evolution of Theobalds in its owner's mind. First, the building or rebuilding of the south side of the 'mean' court as an entrance block containing a fine, broad hall. Second (perhaps conditional on the availability of an adjacent property), the conception of a formal group of four further courts preceding the original court. There is no doubt that Theobalds did develop in this way and it may be that the house stood, for a short period, somewhat as shown in the under plan. Against this, however, there is some rather striking evidence that the hall block and the new courtyard in front of it were conceived and built together as a single project. This evidence comes from the famous book of John Thorpe in the Soane Museum. The plan on pp. 221 and 222 in this book (pl. XXVIII, *b*) bears so very close a resemblance to Theobalds in general disposition that it must certainly be connected with it. It shows (right) part of the old 'mean' courtyard butting into the new hall block, and the latter developing two wings which are joined, opposite the hall, by a narrow building between staircase-towers, with an open loggia at ground level and a projecting gatehouse. In all essentials this is Theobalds, yet the dimensions throughout scale a little too large and certain important details, like the hall porch and the gatehouse, are not as executed. Both these features have flaps, but the revisions approach little nearer to the executed versions. With this very puzzling plan we must associate another Thorpe drawing (p. 115) which shows a section through a courtyard of exactly the same type (pl. XXVIII, *a*). The association is enforced by the use in both cases of a very unusual scale, in 3-ft. units. The section does not fit the plan, nor does it conform exactly with the known dimensions of the executed house. Yet Theobalds it surely must be.

Almost certainly, this plan and section are projects for Theobalds. But how do they come to be in Thorpe's book, whose compilation cannot have started till long after this part of Theobalds had been built[1]—and built rather differently? There is, I think, a possible answer which helps to solve this and some other Thorpe riddles. It is surely very probable that many plans in Thorpe are copies of other plans which, in turn, were very likely themselves copies of originals. Thorpe was an officer in the Queen's Works and as a young man knew well the people who (as I shall show presently) had been concerned with the building of Theobalds. Old plans would be readily available for him to copy and it may be that sometimes his copies were rather free. Hence, what we are studying here are not original drawings for Theobalds but, very likely, Thorpe's approximate copies of them. It is worth noting that, in the case

[1] J. Summerson, 'John Thorpe and the Thorpes of Kingscliffe' in *Architectural Review*, Nov. 1949. Thorpe's probable dates are here shown to be 1563–1655.

of the section, Thorpe was even unaware of (or indifferent to) the association with Theobalds, the house which, in after years he was himself to survey so carefully. His pencilled caption is as follows: 'Ment for one of the sydes of a house about a cort & may be made y^e^ front of a house.' To him, it was nothing but a useful specimen of design.

The existence of these probable copies of early projects for the new court at Theobalds suggests that the new hall block and the new court were at some date (which, as we shall see, must be before 1567) proposed as a single entity and I am therefore inclined to read the site plan and its flap as evidence of a juncture where there was uncertainty as to procedure (incidentally, Cecil himself endorsed that plan as 'voyd'); it may well be that the elimination of the site restriction so evident in that plan changed the whole outlook. I am also inclined to think that there may have been a false start and that cellars were formed for a hall some 5 ft. wider than the hall eventually built. These cellars show in Thorpe's survey[1] on his basement plan, but not on his ground floor. It is scarcely conceivable that the cellars should have been made to extend outside the superstructure as they do unless there had been some such change of programme.

We must, I fear, leave the beginnings of the new court at Theobalds under something of a cloud. Its completion is better documented. In the muniments at Hatfield we have Cecil's household accounts for the years 1566–78[2] and in each account there is a summary of expenditure on building, including Theobalds. In 1566–7 the Theobalds figure is a mere £150. In the next four years it rises from £1,200 to £1,500 per annum and in 1571–2 it reaches a peak at £2,700. The account for 1569–70 shows that the hall was then complete, the 'carver for the skrene' being paid for his work.

The accounts harmonize easily with some letters, already well known, in the State Papers[3] addressed to Cecil by Sir Thomas Gresham. They concern the importation of building materials from Flanders and especially the making of a stone 'gallery' which had been ordered through Gresham's mason, Henryk, by 21st August 1567. I have elsewhere suggested[4] that this gallery was in fact the loggia in front of the hall, as clearly shown in the Thorpe survey—a structure on similar lines to that still partly existing at Burghley (which was also obtained from abroad through Gresham). The accounts now confirm this for, in spite of some delay in February 1568 through Henryk losing 'the design for the pillars', the work was in course of erection at Theobalds in 1569–70 and there is an entry to 'Masons on y^e^ stone gallery' in the account for that year. In this context, 'stone gallery' can mean nothing else.

[1] Thorpe's survey of the basement and ground floor of Theobalds House, in his book of drawings at Sir John Soane's Museum, is very difficult to date. On the basement plan are inscriptions, 'y^e^ Qs wyne cellor' and 'my Lo: wyne selor' which, in combination, strongly suggest an Elizabethan date. Yet we know that Thorpe was active at Theobalds in 1606–10 (Pells Order Books as quoted in my article, see note 14) and this would obviously be the likeliest date for a survey to be made—in connexion with the change of ownership in 1607. Thorpe's survey of the whole estate (British Museum, Cotton, Aug. 1, i, 75) is dated 1611.

[2] Hatfield MSS. Box G (16). I am grateful to Mr. Lawrence Stone for drawing my attention to these accounts, which are not calendared by H.M.C. The sums are quoted here in round figures.

[3] Cal. S.P. Dom. (1547–80), p. 317; Addenda (Eliz.), pp. 44 and 49.

[4] Rhind Lectures, Edinburgh, 1953; not published, but quoted by C. Hussey, *Country Life*, 10th Dec. 1953, p. 1963.

The new hall block was therefore substantially complete by the end of 1570, in ample time for the queen's first state visit in September 1571. How far the new court had proceeded we do not know, but as expenditure in 1570–1 was the heaviest yet incurred we may assume that Cecil was forging ahead with the whole scheme of court and gatehouse, and even of base court and service courts as well, as shown schematically on the flap of the site plan. The queen would in fact, in the late summer of 1571, find herself surrounded by works in progress. Cecil tells us that certain 'verses' were presented to her on this occasion, 'with a portrait of the house'.[1] This 'portrait' is usually assumed to be a souvenir representation of the building, but in the circumstances it is surely more likely to have been a design. 'Portrait' or 'portraiture' (Latin *protractio*) was a word commonly used for architectural designs.[2]

This year 1571 marks the peak of Cecil's career. He was 51, and in February was created baron of Burghley. He was the successor designate of the aged Lord Treasurer, the marquis of Winchester; nor had he long to wait, for Winchester, well advanced into his eighties, died in the following year. It would be natural that at this time Cecil's building ambitions should expand to their fullest extent. His own position justified a mode of life equal to that of any nobleman in the realm. But that was not all; Theobalds, bought in the first instance as an endowment for his younger son, had become, after the 1571 visit, rather in the nature of an offering to his royal mistress. Seen in that light, no magnificence could be in excess. The queen expected it; indeed, we have Cecil's own statement that she instigated it.[3] There is no possible doubt that from 1571 Theobalds was envisaged less as a nobleman's house than as the queen's occasional palace, and the remainder of its architectural history must be studied in that light.

The queen came again in July 1572[4] and a schedule of accommodation prepared for this event is preserved at Hatfield.[5] It is for us a most important document for it shows that the queen, the court, and Cecil himself were all lodged in buildings on three sides of a court in which the hall was on the *west*. For the recently erected hall to be on the west of such a court can only mean that this was the new court and not the old. The two wings therefore had been completed. There is no mention whatever of the old court which must therefore have been out of commission.[6] Presumably it was being rebuilt.

At this point the whole eventual fabric of the completed Theobalds begins to emerge. In the account for 1571–2 expenditure is, as we have seen, the highest for any single year, at £2,700; in the following year the account is missing, but for 1573–4 the figure is £1,600 and it is only after that that it begins to drop below £1,000. Against this background of high expenditure we must try to define exactly what Cecil was building. Anticipating the evidence for a moment, I suggest that the work in hand at the opening of the building season of 1573 comprised the following:

[1] Nichols, *op. cit.* i, 291, quoting from Lord Burghley's diary.

[2] Cf. de Vries, *Multarum variarumque protractionum . . . libellus*, Antwerp, 1555, etc. For the medieval use of the word in this sense see J. Harvey, *English Medieval Architects*, 1954 (index, s.v. *portraiture*).

[3] 'Upon fault found with the smal mesure of her chamber, which was in good measure for me; I was forced to enlarge a room for a larger chamber', Nichols, *op. cit.* p. 205.

[4] Nichols, *op. cit.* i, 308. A three-day visit.

[5] H.M.C. Hatfield, xiii, 110.

[6] Neither is the old court (or its successor on the site) mentioned in the similar schedule of accommodation given in Nichols, *op. cit.* (1823), ii, 400–4, and dated 27th May 1583. On the other hand the schedule Hatfield 143 (69) includes many rooms in the newly built court.

(*a*) The closing of the new court on its east side with a two-story building comprising open and closed galleries and a projecting gatehouse.

(*b*) The erection of a three-story gallery block projecting southwards from the main building and forming the west side of the south lateral court.

(*c*) The rebuilding of the old 'mean' court on a new plan to contain a grandiose succession of state rooms dedicated entirely to the queen and, in fact, rendering Theobalds as a whole comparable to the finest of her palaces.

Taking each of these sections in turn we shall find that there is evidence which enables us to reconstruct, in great measure, the form of the final building.

(*a*) It seems that, from the beginning, it was Cecil's intention to close the new court—which we may now call Middle Court—with a low narrow building in the French manner.[1] The site plan flap suggests this. The two early Thorpe drawings tend to confirm it and on the early Thorpe plan we see, for the first time, a gatehouse projection in the centre. Then come three drawings at Hatfield[2]—two plans and one elevation (pl. XXVI, *a*, *b*, and *c*)—very close to the executed structure, which we find from the accounts to have received the finishing touches in the course of the year September 1573–4.[3] At least two hands are involved in these drawings and there are corrections by Cecil himself. The elevation is towards Middle Court and shows superimposed open arches, the centre pair flanked by coupled columns or pilasters, all very crudely drawn. In execution, the upper story was certainly closed and the upper row of arches probably gave way to a windowed wall.[4]

(*b*) The gallery block projecting south and forming one side of the south service court is a rather unexpected element in the plan. Thorpe's survey (pl. XXIX) has room only for its junction with Middle Court. It is, however, roughly indicated on two plans at Hatfield[5] which show conclusively that it was in existence before the rebuilding of the 'mean' court and there is also at Hatfield an elevation[6] of it (pl. XXVII, *a*), annotated by Cecil in a sense which makes it clear that it was built after the south block of Middle Court, whose parapet height he notes that it was to adopt.[7] The date is thus certainly 1572–3. The elevation, with its low open arches and three continuous bay-windows, is very simple, and most useful as giving some indication of the probable character and floor-levels of the adjacent Middle Court—very different from the high-roofed and dormered version in the early Thorpe section. Incidentally, it has not, I think, been noticed that some remains of this gallery are still traceable on the site.

(*c*) The rebuilding of the 'mean' court brings us to the crowning episode in the construction of Theobalds. Most fortunately there is preserved at Hatfield a preliminary plan[8] on the back of which Cecil gives us not only the date but the name of

[1] Philibert de L'Orme's Anet (*c.* 1552) is the outstanding prototype. A. Blunt, *Art and Architecture in France, 1500–1700* (1953).

[2] Hatfield MSS. vol. 143, 46, 48, and 50.

[3] 'Painting . . . 2 tippes on y^e^ porters lodge' in the account for that year.

[4] See the Parliamentary Survey to be quoted later.

[5] Hatfield MSS. vol. 143, 37, 38, and 40.

[6] *Ibid.* 143, 41 and 42.

[7] 'this vamure [parapet] must agre w^t^ the vamure of y^e^ buildyg on y^e^ Chappell syde.'

[8] *Ibid.* 143, 31 and 32.

the draughtsman—'1572 [The platt of Thebalds][1] by Hawthorn for y^e^ Inner Court' (pl. XXV, *a*). Here we have, for the first time, a dated drawing and one bearing the name of its author. Of Henry Hawthorne we know a certain amount. He was granted a patent as Purveyor to the Queen's Works on 5th November 1562 at 8*d*. a day.[2] His name does not appear in the works accounts, however, till 1566–9.[3] Thereafter he is constantly employed at one or other of the royal houses till 1573–4, after which he appears no more, the evident reason being that he has joined the separate works establishment at Windsor as a senior officer. In the Windsor accounts[4] he is receiving, in 1574, 2*s*. per day, the same pay as Humphrey Michell, the surveyor. In 1575 this arrangement is confirmed and Hawthorne is in direct charge of all technical matters.[5] In the same year he is mentioned in a letter from Leicester to Cecil about some stone for a banqueting-house in Leicester's garden.[6] And in 1576 or the following year he made plans for the considerable improvements which the queen had ordered at Windsor Castle.[7] We have no certain knowledge of him after 1577. It is curious to find a purveyor (normally an administrative and business type) who is also a maker of plans. Cecil must have used him at Theobalds from about 1564 and no doubt secured his preferment to Windsor. There is a drawing,[8] clearly in his hand, for the window of the Great Chamber (pl. XXVII, *b*). He may have been responsible for the elevation and one of the plans of the gatehouse and gallery and the elevation of the garden gallery.

Hawthorne's plan for the newest court (henceforward to be called Conduit Court) at Theobalds is of first-rate interest. It shows a virtually square court with buildings on all sides and four square corner towers (two being only partly drawn). This theme is, in principle, as old as the thirteenth century (compare Acton Burnell, Salop.) but it seems possible that in this conspicuous instance, where there are no obvious recent prototypes, it derives from the plan given by Serlio[9] in his third book, of the Poggio Reale at Naples; if it does, it is the first English house plan that we know to be based directly on an Italian prototype. We need not attribute to Hawthorne any great learning or judgement in the matter; the choice of this example may just as well be Cecil's, whose interest in architectural books is known. Had he not, four years earlier, asked Sir Henry Norris in Paris to get him an architectural book he had seen at Sir Thomas Smith's?[10] Serlio's already hackneyed work he could not fail to have known.

In execution the Hawthorne plan was much modified. A transitional stage is shown in a diagram annotated by Cecil (pl. XXV, *b*). Later came the thickening of the south block to take in an open loggia on the ground floor; also the addition of a great projecting bay on the west. Probably some parts of the old walls were incorporated, for the width of the courtyard remained virtually what it had been since the 'mean' beginning of 1564. But the superstructure with its four massive corner towers and

[1] These words, written first, are not in Cecil's hand.
[2] *Cal. Pat. Rolls*, 1560–3, p. 301.
[3] P.R.O., E 351. 3204.
[4] W. H. St. J. Hope, *Windsor Castle*, Pt. 1, 1913, p. 271.
[5] *Ibid*. p. 272.
[6] Nichols, *op. cit*. i, 524.
[7] W. H. St. J. Hope, *op. cit*. Pt. 1, p. 274.
[8] Hatfield MSS. vol. 143, 33.
[9] Sebastiano Serlio, *Architettura*, Lib. 3 (1566), p. 122.
[10] *Cabala Sive Scrinia Sacra*, 3rd ed. 1691, p. 141.

sixteen turrets was something on a different scale of magnificence altogether as we shall see when we come to reconstruct it in the light of the Parliamentary Survey and Works accounts.

The progress of Conduit Court is indicated by various items in the household accounts and other papers at Hatfield. By 1578 bricklayers were making chimneys.[1] In 1582 there is an account for the cast brass terms for the Great Chamber chimney-piece[2] and in the same year the glazier has been at work on heraldic glass in the Great Chamber and the Great Stairs.[3] In 1585 the elaborate and rather fantastic decorations of the Great Chamber will have been complete, for Cecil alludes to them in that year in his apology for extravagance at Theobalds.[4] In 1585 also the joiners were finishing in the North Parlour; an open room at the north-west corner of the building was to be levelled; and rails with balusters were being provided for Conduit Court itself.[5] For practical purposes, 1585 may be taken as the year of completion of Theobalds as a whole, though the Great Gallery had to wait for its chimney-piece till 1591.[6] In 1592 we have Rathgeb's description of his master's (the Duke of Wurtemberg's) visit,[7] and the impression given is one of full accomplishment. It is true that another visitor, the duke of Stettin-Pomerania,[8] in 1602, found one of the five courtyards 'not quite finished' but this could be one of the two principal service courts which may never have become entirely enclosed.

During the last phase of the building, Cecil constructed a straight walk or causeway from the London road leading up to the centre of the Base Court.[9] Previously, the house had perhaps been approached from the St. Albans road by a crooked drive as indicated on the flap of the early site plan.[10] The new straight drive was to be levelled in 1585. Where it entered the Base Court, Cecil had already probably built a gateway, for which he obtained a design (preserved at Hatfield) in 1577 (pl. XXVII, *c*).[11] The design is signed in monogram J. S. which we know from other sources to be the signature of John Symons or Symondes, a man who from 1570–1 had acted as purveyor, as clerk and in other capacities in the Queen's Works[12] and who achieved a reputation as something very like a professional architect.[13] As nothing is known of Henry Hawthorne after 1577 it may be that he died in that year and that Cecil took on Symons as his successor. He certainly procured a plan from Symons for Burghley House in 1578,[14] so much of the later work both at Burghley and at Theobalds may be due to him. Cecil also employed the services of Thomas Fowler,[15] the comptroller of the Queen's

[1] Hatfield Box G (16).
[2] Hatfield MSS. vol. 143, 57.
[3] *Ibid.* 143, 58.
[4] Nichols, *op. cit.* i, 111.
[5] Hatfield MSS. vol. 143, 59.
[6] *Ibid.* 143, 65.
[7] Printed, in translation, in W. B. Rye, *England as seen by Foreigners*, 1865.
[8] The diary of his visit to England (Sept.–Oct. 1602), written by his secretary, F. Gerschow, is printed, in translation (ed. G. von Bülow), in *Trans. R. Hist. Soc.* N.S. vi, 1892. I am grateful to Mr. Francis Watson for drawing my attention to this source.
[9] An item in a memorandum by Cecil, 4th June 1585 (Hatfield 143 (59)) reads: 'To levell ye new way frō ye streteward'.
[10] Hatfield MSS. vol. 143, 28.
[11] *Ibid.* 143, 47.
[12] P.R.O., E 351. 3206 et seq.
[13] See notes on Symons in my article 'John Thorpe, etc.', quoted above. Also his signed plans for Sir R. Cecil's Chelsea house in A. W. Clapham and W. H. Godfrey, *Some Famous Buildings and their Story*, pp. 82, 83.
[14] Hatfield MSS. vol. 143, 99.
[15] Fowler was Controller of the Queen's Works for forty years, from 1556 till his death in 1596 (*Cal. Pat. Rolls*, 1555–7, p. 254). His will, P.C.C., Drake 8, contains legacies to Lord Burghley.

Works, but this was probably in an administrative capacity. Fowler approved the plasterer's account for 'the stables and the lodge' in 1578[1] and in 1582 received a sum 'upon works' of an unspecified kind.[2] It was Fowler, too, who instructed Symons (his subordinate in the works) to prepare the design for Burghley House just mentioned. It was natural that Cecil should employ the officers of the works for his own business and we know, incidentally, that he and Fowler were on terms of friendship,[3] but everything points to the main decisions as to design being taken by Cecil himself. There are rough memoranda plans in his own hand[4] and many of the drawings at Hatfield are annotated or dimensioned by him. One should never look for an 'architect' (in the eighteenth-century or modern sense) in an Elizabethan building scheme, and one of the facts most clearly emergent in a study of Theobalds is that Cecil himself was, from beginning to end and in all significant matters, the master of his own works.

II

Thus much of the building history of Theobalds can be extracted from the documents at our disposal. It is now a question of considering the building as a whole as it stood while still in Cecil's hands and attempting to reconstruct as much as we can of its form and ornaments by reference to the same and other documents and to the slight remains on the site.

The siting of the house gives no trouble. Placing Thorpe's plan over the O.S. 25 in. map, with the south-west angle of the south porch on the point where a brick-and-stone quoin still stands[5] we find that Thorpe's west block can be made to lie comfortably over the lines of the present Old Palace House (pl. XXXII, *a*). As a check we may produce the line of the west side of Dove-house Court from Thorpe's plan, finding it to lie in the same line as the remains of a brick plinth in Cedars Park, the southernmost quoin of which may well be Elizabethan.[6]

Nothing on the site helps in any way to a visual image of the scene in Cecil's time. For this we must go to the two primary documents in the case—Thorpe's detailed survey plans, already mentioned, and the Parliamentary Survey of 1650,[7] the latter a rather confused document but wonderfully full. We must be careful to allow for certain additions and alterations made after Theobalds came to the Crown in 1607; this we can do with fair accuracy by constant reference to the Works accounts in which expenses at Theobalds are set out annually from 1606 to 1648.[8]

[1] Hatfield MSS. vol. 143, 55.

[2] *Ibid.* 143, 58.

[3] See Fowler's will, cited above.

[4] *Ibid.* 143, 37 and 45, seem to be largely in Cecil's hand.

[5] This is in the garden of the present Old Palace House but is integrated with a wall which forms the boundary between this garden and the Cedars Park (Cheshunt U.D.C.). The wall (largely of eighteenth-century or later brickwork) runs north for about 17 ft. then returns east in the Cedars Park. In the return is a recess covered by a four-centred brick arch, as shown opposite the porch in Thorpe's plan. This is obviously Elizabethan work and contains, in its upper part, a three-light opening in stone.

[6] This quoin is at the south-west angle of a row of outhouses belonging to Cheshunt U.D.C. A brick plinth with moulded stone water-table runs north from the quoin and there is a canted projection the lower courses of which may have been the base of one of the three canted bays of the Open Gallery.

[7] P.R.O., E 317 Herts. No. 26. Referred to hereafter as *Parl. Sur.*

[8] P.R.O., E 351. 3241, etc.

We approach the house from the London road through a gate in a wall which encloses on the right a horse-pond and on the left a lodge, a 'nursery' (garden), and the end of the moat.[1] The straight walk to the house, between rows of young elm and ash,[2] is ahead of us (compare the air-view,[3] pl. xxx). The survey[4] gives the distance from the outer gate to the centre of the Inner Court as 'one hundred pole' or 550 yards (which agrees, within 5 yards, with the Ordnance Survey); it states that 'the figure of Cupid and Venus' on a fountain in the Inner Court can already be discerned from where we stand at the high-road gate. 'The like walke', it continues, 'for lengthe, pleasantnesse and Delight is rare to be seene in England.'

We now walk up to the first court, the Dial Court, which we enter through a pair of large gates 'with a tafrill of stone standinge on the topp of y^e^ brick wall over y^e^ gate verrie well wrought'.[5] This was evidently 'my othermost gate' for which Symonds made the design (pl. xxvii, *c*), the 'tafrill' being the ornamental tracery at the top. Certain porters' lodges on either side, mentioned by the survey, seem to have been added at the time of the exchange in 1607 or very shortly before.[6]

Passing through this gate we continue along a paved way across Dial Court which is some 52 yards wide.[7] To left and right are two-story buildings which separate us from Dovehouse Court on the left and Buttery Court on the right. These housed (left) the brew-house, bake-house, and laundry, and (right) the stables,[8] but were reconstructed as lodgings after 1607.[9] In front of us is the main entrance to the great house itself. This is in the centre of a two-story building placed between two four-story towers which are the ends of the three-story wings.[10] The entrance is in a centre projection and framed within a 'portal' of which Thorpe indicates the pedestals. Above this portal and rising from the balustrade is a structure which the survey describes as follows: 'Two loftie arches of bricke . . . railed on the topp, with wooden rails and Balisters'. It is 'of noe small ornam^t^ to the . . . house but renders it comely and pleasant to all that passe by'.[11] One may find parallels for a feature of this kind in certain porches and screens;[12] it would be surprising if it were not originally designed to display some heraldic feature—perhaps removed at the exchange.

Entering the archway we are within a loggia of seven arches open towards the court, with tower staircases at either end. The placing of these staircases is very like what we find contemporaneously (*c.* 1574) at Castle Ashby and there is evidence that, as at Castle Ashby, they rose above the entrance block. At Theobalds they terminate in

[1] Shown in a plan at Hatfield, 143 (49), endorsed 'The othermost Gate by y^e^ horse pōd w^t^ the Sators walk. 2 Aug. 1584.' The Satyrs' Walk flanked the south side of the carriage way.

[2] J. Nichols, *Progresses of King James I*, 1828, i, 136, quoting a description of 1603. The breadth of the walk is here given as three rods or some 15 yds.

[3] This air-view is a detail in the map of the park, signed by John Thorpe and dated 1611 (B.M., Cotton MS. Aug. I, i, 75). It will be seen that the representation of the house itself in this view bears no useful relation to actuality.

[4] *Parl. Sur.* f. 26.

[5] *Ibid.* f. 22.

[6] 'Boording floores of the twoe newe lodges for the porters' occurs in the account for 1st Oct. 1607–31st Mar. 1609 (E 351. 3243).

[7] As scaled from Thorpe. *Parl. Sur.* gives the area of the court as 2 roods, 5 poles, 7 primes from which a depth of approx. 50 yds. can be deduced.

[8] H.M.C. Hatfield, xiii, 110 et seq.

[9] E 351. 3224, 3245.

[10] The number and distribution of stories are deduced chiefly from the schedule of accommodation in 1572 (H.M.C. Hatfield, xiii, 110) and *Parl. Sur.*

[11] *Ibid.* f. 15.

[12] Especially screens, e.g. Audley End and Leathersellers Hall. But the porches at Cobham, Kent, and Audley End also illustrate the theme.

lead tips.[1] The seven-arch loggia is, of course, the building we have already seen in the perhaps embryonic design (pl. XXVI, *a*, *b*, and *c*) for a 'gatehouse and gallery' and whose erection must belong to about 1573–4. Above the arches is what was called the Green Gallery. This was certainly glazed,[2] so the double range of arches in the drawing was probably not executed. The lodgings schedule of 1583 says that this gallery was 'painted with the Armes of the Noblemen and Gentlemen of England in trees'.[3] According to the survey,[4] the Green Gallery was 'excellentlie well painted round with all the severall Shires in England and the arms of the Noble men and gentlemen in y^e^ same'. Gerschow, in 1602, is evidently referring to this gallery when he speaks of 'all England represented by 52 trees, each tree representing one province. On the branches and leaves are pictured the coats-of-arms of all the dukes, earls, knights and noblemen residing in the county; and between the trees, the towns and boroughs, together with the principal mountains and rivers.'[5] The survey adds that there were 'two faire chimney peeces of freestone'.[6]

From the windows of this gallery we look into the Middle Court, with the hall block and its stone loggia or 'gallery' at the far end, and three-story buildings to left and right. The hall block we can approximately reconstruct on the verticals arising from Thorpe's plan and in the light of what the survey and works accounts tell us (pl. XXXII, *b*). We have to reconstruct from inside out. We know from the survey that the hall itself was 'arched over at the topp with curved timber of curious workemanshipp and of great worth'.[7] This suggests a hammer-beam roof with curved braces and arched members meeting in the centre. It must have been partially ceiled, as in the contemporary (*c.* 1568) hall at Longleat, for the survey further makes it appear that over the hall was a long gallery[8] and over that again a flat roof-walk. From the works accounts[9] we pick up the information that gables and dormers were involved and that there was a slated roof. There is but one solution, which is to place the gallery in the roof, to light it from dormers, and to flatten the apex of the roof as was done at Hampton Court. The resulting elevations are plausible. The hall ran up through two stories but only, it appears, as far as the halpace or dais. The survey[10] says that the leaden walk across the loggia at first-floor level had 'a Doore at each end', meaning that there was an entry half-way up the side of the hall oriel. To what did it lead? Fortunately the survey comes to our rescue by describing elsewhere[11] a 'Lobbie' at first-floor level, 'with an open wainscott case wrought and Carved to looke Downe into y^e^ Hall'. Evidently something like what we know at Hatfield; though the Theobalds lobby must have extended across the upper part of the oriel.

[1] E 351. 3269 (1635–6). Carpenter on task-work, working and setting up 98 ft. of rails and balusters on 'the twoe Tippes of the greene Gallery'. 'Tippes' invariably apply to pointed coverings, in this case certainly lead (*Parl. Sur.* f. 25). It is difficult to see what the balustrades were for.

[2] *Ibid.* f. 15. There were three 'Belconie doors' to Dial Court, with lead-bottomed 'belconies'. These very un-Elizabethan features may have been added in Robert Cecil's time.

[3] Nichols, *Progresses of Q. Eliz.* (1823), ii, 402.

[4] *Parl. Sur.* f. 15.

[5] See p. 114, n. 8, *ante*.

[6] *Parl. Sur.* f. 15.

[7] *Ibid.* f. 3.

[8] *Ibid.* f. 10.

[9] E 351. 3243 (1607–9). 'Woorking and setting up diverse pedistalls and fynialls . . . upon the gable endes and dormers of the roofes within the seconde courte and th' other endes abutting into the firste courte.'

[10] *Parl. Sur.* f. 9.

[11] *Ibid.* f. 13.

The great feature of the hall externally was, of course, the 'stone gallery' (as the accounts describe it), made in Flanders and erected at Theobalds in 1569–70. Thorpe's survey plan shows that there were two arches on each side of the central arch which was flanked by pairs of columns. The parliamentary survey adds the information that there was an arch above[1] and it would be strange if this was not treated in a similar way, following the precedent of Burghley. The parliamentary surveyors were incapable of exact architectural description and they describe the upper arch as if it were a feature of the leaded walk at first-floor level rather than part of a two-stage central unit. Over the walk, they say, was 'a goodlie faire arch of freestone curiouslie wrought'. Under this arch were 'verrie manie faire curious paintinges and gildinges of pictures, whereof two are called the pictures of *Peace and Warre* with the King's arms [it may be permissible to read Queen's arms] richlie gilded sett over'. The royal arms, one may guess, were set up much as were the heraldic 'taffrils' over arched monuments, though not on the exaggerated scale to which Cecil enlarged that motif at Burghley in 1587. The upper arch could be seen, says the survey, from the main road 'by passengers and travellers to there delight'.

Riding on top of the hall, in the centre of the balustraded lead walk, was one of the most conspicuous features of the house—the louvre or lantern. Although often called in the Works accounts 'the hall lantern' it was centred in fact over the screens passage and had no connexion whatever with the hall. Moreover, it did not function as a ventilator but contained a chiming clock with twelve bells. It was made, says the survey,[2] 'with timber of excellent workmanshipp curiously wrought standing a great height wth divers pinacles at each corner'. The Works accounts show that it was partly lead-covered and that the clock had three dials, one of which showed the signs of the zodiac and the planets.[3] The structure was evidently in the late medieval tradition of the hall louvre at Hampton Court as shown by Wyngaerde (Ashmolean Museum) and the clock tower which we see in Hoefnagel's drawing of Nonsuch (British Museum). Among the Hatfield drawings is one endorsed by Cecil 'platt of y^{e} upp sytȳg of my lover at Thebalds' (evidently a soffit plan) which consists of designs for purely Gothic rib-work.[4]

Returning for a moment to the hall interior, there was panelling on the walls and 'a verry faire screene of good timber of the fashion of wainscott', with a dial fixed over it surmounted by a coat of arms. The chimney-piece was of blue marble: the floor was paved with Purbeck.[5]

We now pass through the screens passage and into the next court—the Conduit or Fountain Court. This was a paved court, 84 ft. square, corresponding in position and function with the Conduit or Fountain Court at Hampton Court as the Tudors left it. That is to say, it was the inmost court, surrounded on three sides by the sovereign's rooms of state, the furthest side facing the privy garden. Across the east side of the court was yet another loggia, this time of seven arches, carrying a leaded

[1] *Parl. Sur.* f. 9.

[2] *Ibid.* f. 10.

[3] E 351. 3261 (1627–8) mentions the laying of two sheets of lead over the lantern. E 351. 3255 (1621–2) includes an item for painting the lantern and painting and gilding three dials, 'whereof twoe of them havinge but xij guilte figures on them . . . the other beinge double with xxiiij or figures in it with the signes and planetts made newe in the same'.

[4] Hatfield MSS. vol. 143, 35.

[5] *Parl. Sur.* f. 3.

walk; in the centre of the other three sides were rectangular bay windows. In the middle of the court was a fountain which the survey describes as follows:[1]

A fountaine . . . made of Black and white Marble, standing upon 4 Marble pillars with a figure of *Venus & Cupid* of white Marble betweene y^e^ 4 pillars with 4 Jammes of y^e^ same stone standinge upon pettistalls, and upon three large stone steppes w^th^ two greate stone boles w^th^ Cocks and pipes of lead to convey water into y^e^ same, placed upon y^e^ s^d^ fower pillars with a figure of an old man on the topp thereof.

Too hasty and inadequate to be altogether clear, this passage leaves us with the idea of a fountain roughly similar to those in the conduit courts at Hampton Court and Greenwich.[2]

FIG. 1. Sketch reconstruction of Theobalds from the South-west. Drawn by Malcolm Higgs.

From this court, as we look up, we see the four square towers which rise at each corner of it and each of which has four slate-hung turrets with lead tips surmounted by lions bearing vanes.[3] We shall see these towers better if we pass out of the court and make a circuit of this part of the building—it is, of course, the part based on Hawthorne's Serlian plan and thus from the architectural point of view the most striking part of the house. We may observe it best from the Great Garden on the south. Here, with the help of surviving fragments, a few drawings and deductions from the survey we may reconstruct the elevation with fair accuracy (fig. 1).

[1] *Parl. Sur.* f. 11.

[2] There is a drawing at Hatfield of the Hampton Court Fountain. Some idea of the Greenwich fountain may be gathered from the Works accounts for 1566–9 (E 351. 3204).

[3] *Parl. Sur.* f. 10, describes the towers as 'high faire and large . . . covered with blue slatt with a lyon and vaines on the topp of each turratt'. Elsewhere (f. 24) are mentioned 'sixteene greate Turretts covered with Blue slatt, fower on each corner of the house round y^e^ ffountaine Court' Gerschow (see p. 114, n. 8) mentions twenty 'einfhering (?einführung) Thürme' of which these turrets will account for sixteen, the others being perhaps the Green Gallery turrets and the towers in the middle of the north and south sides of Middle Court. In the Works accounts, the most illuminating reference to the turrets is in 1620–1 (E 351. 3524): 'mending and new boarding parte of twoe Turretts w^ch^ were decayed and rotten. . . . Hewing of Slates, mending and pointing the Slating and nailing of diverse Slates over vij of the Turretts above in the Leades, and new slating some parte towardes the topp of the sayd Turretts and Scraping of the Mosse from the old slates . . . fitting and nailing of Lead about the Tymberworke above the Slates under the Beasts over the Turretts after the Slater had donne.' The last passage suggests that although the sides of the turrets were slate-hung, they were surmounted by lead coverings. A drawing in Thorpe (p. 148) suggests a type of turret which would answer the particulars.

It seems that the whole of Theobalds, except the tower turrets, was of brick, with stone-dressed openings and stone quoins.[1] Much of it was three stories high but the buildings on the south and west of Conduit Court were of two stories only, except in the towers, while the north block of Conduit Court, containing the North Parlour, was of one story only. The ceiling heights varied and are not all easily established. In the elevation to the Great Garden, first-floor level can be reasonably well established thanks to the 15 ft. high surviving fragment. The roof level and heights of the towers are not so easy. Hawthorne's drawing of the Great Chamber window (pl. XXVII, *b*), preserved at Hatfield,[2] seems to aim at a floor-to-ceiling dimension of 20 ft. which brings us to the leads at about 36 ft. from the ground, which agrees well enough with the 60 steps (= 35 ft., with a 7-in. rise) assigned by the survey[3] to the Gallery Stairs, ascending from the ground floor to the leads. The height of the towers remains indeterminable and can only be assessed from the ratios observable in other houses of the period. We know that they were only one story higher than the remainder of the block so the range of variation is not considerable.

The turrets were covered with blue slates—no doubt imported[4]—and were of timber construction. I know no other instance of slate-covered turrets, though slate-hanging was extensively used at Nonsuch.[5] There seem to have been lead tips and above these were lions carrying vanes. The Works accounts[6] mention a replacement of stone 'pedistalls' on the tops of the towers which confirms that there were balustrades.

The middle section between the towers had a nearly flat lead roof with balustrades. In the lower part of this section was a loggia of seven arches resting on stone piers, the centre bay projecting, with compound piers, one of which in part survives. This loggia was about 10 ft. deep and is described in the survey[7] as 'well painted with Kinges and Queenes of England and the pedigree of the old Lord Burley and divers other antient families, with paintinges of many Castles and battailes, with Divers subscriptions on the walls'. Some sketches at Hatfield[8] showing the Cecil pedigree in arboreal form are perhaps related to this. The very crude plates of fragmentary remains given by Nichols[9] hardly help.

Above this loggia were the windows of the Great Chamber, later called the Presence Chamber with, to the left of it, the Privy Chamber. To the disposition of these windows (apart from the centre window) we have no guide. The bay-windows in the towers are placed off-centre. Assuming them to have been continuous in height, they would have the effect seen at Audley End, which is probably an imitation of them.

Eastward of the symmetrical and self-contained façade of Conduit Court was the far less regular elevation of the building forming the south side of Middle Court. At least, that is how one is tempted to interpret Thorpe's plan, though there is a slight difficulty in respect of the tower at the junction—i.e. the south-east tower of

[1] *Parl. Sur.* f. 26.

[2] See p. 113, n. 8, *ante*.

[3] *Parl. Sur.* f. 24.

[4] Cal. S.P. (1547–80), p. 317. Quantities of slate and board had arrived on the site in 1568, on the order of Gresham. This slate, evidently imported from Flanders, would, of course, be for the hall roof.

[5] See Evelyn's description, *Diary*, 3rd Jan. 1666.

[6] E 351. 3243 (1607–9).

[7] *Parl. Sur.* f. 23.

[8] Hatfield MSS. vol. 143. See also pedigrees annotated by Cecil in S.P. 15, vol. xiii, No. 122.

[9] *Op. cit.* (1788), pls. 32 and 33. These plates are omitted from the 1823 ed.

Conduit Court. This tower already existed in 1572, when it formed part of the hall block and was called the Great Tower. It cannot possibly have been designed with foreknowledge of the three other great towers of Conduit Court, but it is conceivable that its design was accepted and repeated when Conduit Court was built. The likelier alternative is that it was altered after 1572, to conform with its new companions.

The south front of Middle Court, towards the Great Garden, cannot be reconstructed with any confidence, but a degree of irregularity in the fenestration seems inevitable and would, at the date (1570–1), be normal. This block contained the royal lodgings used by Queen Elizabeth from 1572.[1] She was still using them in 1588,[2] in spite of the fact that the new lodgings at the south-west corner of Conduit Court were probably ready by 1585. Her bedchamber was under the tower which rose in the centre of the block. Eastwards it led to the Privy Gallery, westwards to the Vine Chamber (used as her withdrawing chamber). For Presence Chamber she used the Great Parlour on the ground floor of the adjacent tower. The chapel, on the ground floor, ran through two stories; there is no evidence as to the style of its windows.

At its east end this block joined the open gallery which ran southwards along the side of the Great Garden. As we saw in the contemporary drawing of it, there was an open arcade on the ground floor which James I caused to be bricked up and partitioned in 1607.[3] The first floor presumably contained lodgings, while on the second was a long gallery 'with an arch seelinge'.[4]

It would be unprofitable to attempt to describe other parts of the exterior of Theobalds, since there is little information available about them while in general terms they would no doubt repeat what we have seen on the Great Garden side. The west front, facing the Privy Garden, had extruded corners and a vigorously projecting central bay serving, perhaps, as a luminous embrasure to the Great Gallery on the first floor. On the north side there was no attempt at symmetry and the north parlour block rose only one story in height.

We now come to the interior disposition of the building and the decoration of its main apartments. It is unfortunate that we have no plan higher than ground-floor level, nor have we any plan (except Thorpe's cellar plan) on which the apartments are named. We can only grope our way with clues extracted from the schedules of accommodation drawn up for royal visits in Cecil's time and from the parliamentary survey, allowing for the fact that the designations in the latter are likely to be Jacobean or Caroline rather than Cecilian. Sufficient information nevertheless can be gleaned to make complete sense of the plan. In Middle Court the south block contained as we have seen the lodgings used by Queen Elizabeth and very likely reserved continuously for her until at least some years after the new lodgings in Conduit Court were complete. Opposite, on the north side, were Cecil's own lodgings and those of his relatives and household staff. He may have moved to the west block of Conduit

[1] The position of the Royal Bedchamber under a tower rising from the middle of this side of Middle Court can be deduced from the schedule of accommodation in that year. See p. 111, n. 5, *ante*.

[2] Schedule of accommodation apparently belonging to that year, Hatfield MSS. vol. 143, 69.

[3] E 351. 3242.

[4] *Parl. Sur.* f. 17.

Court when that building was ready.[1] The hall block contained, on the north, a parlour with lodgings for important personages over it to which the roof gallery was attached.

The buildings round Conduit Court principally consisted of rooms of state and included the most spectacular interiors. Starting in the south-east tower which, as we have seen, must date from about 1570, though possibly altered later, we have the Great Parlour on the ground floor and, next to it, the grand staircase leading up to the Great Chamber. This stair still exists. Removed from Theobalds, it was built into Crew's Hill House, Enfield, then purchased and installed by Sir Henry Bruce Meux in the museum of his house at Theobalds Park towards the end of the nineteenth century (pl. XXXI, *a*).[2] Sold in 1911, it eventually became the property of Sir Claude Lowther who introduced it in his restoration of Herstmonceux Castle, Sussex. It was rearranged there under Mr. Walter H. Godfrey for Sir Paul Latham between the wars (pl. XXXI, *b*). In style it is very close to the staircase of 1571 at the Charterhouse, which was completely destroyed in the blitz.[3] If the Theobalds staircase belongs to the date of the hall block as a whole (1567–70) it would be earlier than the Charterhouse specimen and thus the prototype of a whole succession of similar staircases, the latest of which is probably the (rearranged) staircase at Blickling (1626). But a later date is on the whole more likely especially as we know that the glazing of 'y^{e} g$^{r.}$ stears to y^{e} g$^{r.}$ chamber' was done in 1582.[4] It probably formed part of the rearrangement of the south-east tower to suit the composition of Conduit Court as a whole.

The original material in the stair includes several newels with relief panels of 'grotesk-work'. There are three types, incorporating respectively musical instruments, military trophies, and carpenters' tools. Neither in these nor in any other part of the stair are there any heraldic or other allusions to its first owner. It is quite obvious, however, that this was Robert Cecil's model for Hatfield where the general design of the stair and even the profiles are repeated.

From the top of this stair we pass into the Great Chamber, probably at one time the most striking of all the rooms at Theobalds. We have descriptions of it at different dates and it appears from them that the room was a good deal altered after its first completion. The only Elizabethan description is that of Rathgeb[5] in 1592:

> There is a very high rock, of all colours, made of real stones out of which gushes a splendid fountain that falls into a large circular bowl or basin supported by two savages. This hall has no pillars; it is about 60 ft. in length and upwards of 30 wide.

30 ft. would be correct. The estimated length suggests that the chamber extended only across five of the seven bays of the loggia below it, leaving some 20 ft. for the Privy Chamber beyond. Rathgeb continues:

> The ceiling or upper floor is very artistically constructed: it contains the 12 signs of the Zodiac, so that at night you can see distinctly the stars proper to each: on the same stage the sun performs its course, which is, without doubt contrived by some concealed ingenious mechanism. On each side of the hall are six trees, having the natural bark so artfully joined, with birds'

[1] His son will certainly have used these new lodgings which were called, even as late as 1650, the Earl of Salisbury's lodgings (*Parl. Sur.*).

[2] *Catalogue of sale by Waring and Gillow Ltd., May 15–26, 1911, of Furniture and Contents of Theobalds Park* in Cheshunt Public Library.

[3] J. A. Gotch, *Early Ren. Arch. in Eng.* 1901, p. 193.

[4] Hatfield MSS. vol. 143, 58.

[5] See p. 114, n. 7, *ante*.

nests and leaves as well as fruit [that] when the steward . . . opened the window birds flew into the hall, perched themselves upon the trees and began to sing.

These remarkable trees, apparently contrived with real bark, must be those to which Cecil alludes in his apology for alleged extravagance at Theobalds, written in 1585.[1] He tells us that because of the queen's 'special direction' he 'was forced to enlarge a room for a larger chamber: which need not be envied for any for riches in it, more than the shew of old oaks, and such trees with painted leaves and fruit'. Strype adds editorially that the room was 'set forth with several trees of several sorts, with the arms of the nobility, officers of state, the bishops etc.', his source for this statement being, no doubt, a draft in Cecil's hand of the whole scheme, from which it appears that, besides oaks, elms, ash, walnut, and black cherry trees were involved.[2] We may identify the room as being the subject of Gerschow's comment in 1602: 'In the next [room] the coats-of-arms of all the noble families of England, 20 in number, also all the viscounts and barons, about 42, the Labores Herculi, and the game of billiards, on a long cloth-covered table.' But this might conceivably fit the Green Gallery and it may be significant that there is no mention of the rock or the astronomical ceiling or the trees. However, when we come to the survey of 1650 it is clear that at some time after Rathgeb's visit in 1592, the whole character of the room had changed. The surveyors[3] noted no coats of arms (except in the windows) but found the room panelled with oak, 'Coullered of a liver couller and richlie gilded with gold, with Antick pictures over y^e^ same, seeled with a plastered frett . . . seelinge full of gilded pendance hanging Downe settinge forth the Roome with greate splendor.' The survey mentions a chimney-piece of black and white marble with four pilasters, the queen's arms, and two 'Brasse coloms of the figures of *Vulcan & Venus* standinge before y^e^ Jammes'. These we recognize as the latten terms for which an account was presented in 1582 by Henry Pytt, ironfounder.[4]

But the panelling mentioned here must surely be later, while the ceiling is obviously a replacement of the astronomical affair and we must conclude that at some date after 1592 and most probably during Sir Robert Cecil's occupancy (1598–1607) the room was wholly remodelled. There is a drawing of the panelling by John Smythson dated November 1618[5] and one can readily believe that this work (which Smythson copied at Bolsover) was not so very old when he saw it. It was, however, old enough to have needed repainting and gilding in 1610–11.[6]

At the west end of the Great Chamber (called, in Stuart times, the Presence Chamber) was, probably, the Privy Chamber, a panelled room with hangings and a marble chimney-piece with carved lateral figures and 'frontispiece'.

Then came the Withdrawing-room which is hard to place but must have occupied part of the south-west tower. Here again was panelling and a columned chimney-piece. The rest of the space in the tower at this (first-floor) level must have comprised

[1] J. Strype, *Annals*, 1824, iii, Pt. 2, pp. 380–1.
[2] B.M. *Lansd.* 104, 24.
[3] *Parl. Sur.* f. 6.
[4] Hatfield MSS. vol. 143, 57. The terms were first carved in wood by a Flemish carver and joiner, John Degrave (see references to him in Huguenot Society index). Other carvers are mentioned. Hatfield MSS. vol. 143, 36 is a paper containing two estimates for this chimney-piece.
[5] In the Smythson Collection, R.I.B.A.
[6] E 351. 3245 (1610–11).

the Royal Bedchamber. Although structurally complete by 1585,[1] we have no evidence that Queen Elizabeth ever slept here. Moreover, the room was fitted with doors and shutters in 1612–13[2] and a ceiling with gilded knobs in 1614–15[3] so, apart from a three-pilaster marble chimney-piece it cannot have been much of a place in Cecil's time.

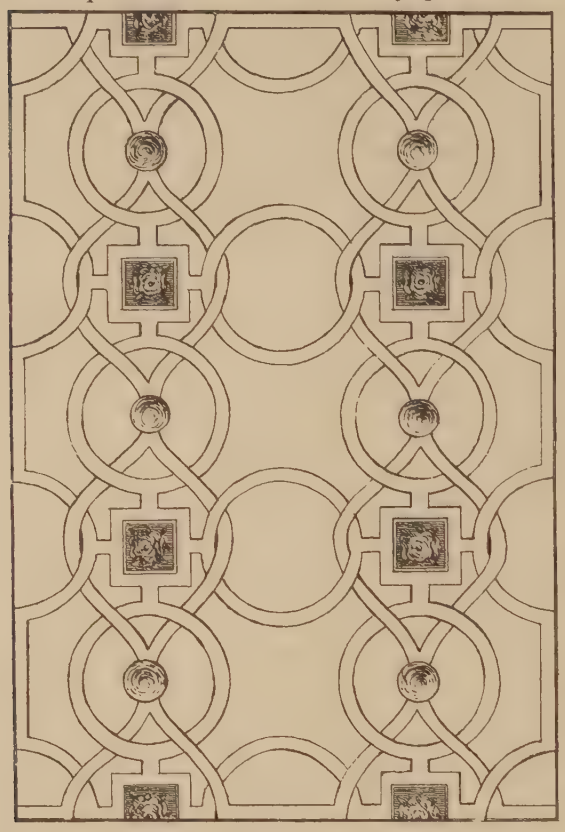


FIG. 2. A ceiling at Theobalds. From W. B. Rye, *England as seen by Foreigners*, 1865.

A room for the pages comes next in the survey and can be roughly located on the plan and this is followed by the Long Gallery—or, as it was called in Cecil's time, the Great Gallery. This, 21 ft. wide and 123 ft. long, occupied the whole remaining length of the west range including a projection at the north over an 'open room' or porch.[4] The plan shows that it cannot have been uniformly lit and when we read in the survey[5] of 'three square Lobbies or outletts, unto square windowes' we understand the sort of irregular arrangement which must have prevailed. There was a carved wood 'portall' at the south end of the gallery, a window at the north and, of course, windows looking west to the new Privy Garden and east into Conduit Court. The chimney-piece was probably the grandest in the house, with eight columns and carved and painted figures of horses and men. There was 'a frett seelinge wth Divers pendents Roses and flowerdeluces, painted and gilded' and this may perhaps be the ceiling of which Rathgeb[6] made a sketch in 1592 (fig. 2). This record is extremely interesting. For here is a pattern which prevails also in the vaulted stone ceilings and arch-soffits at Burghley and provides also the basis for many yet more florid ceilings of late Elizabethan and Jacobean times.

But the most memorable feature of the Great Gallery will have been the painted frieze above the panelling. The survey[7] mentions 'Divers citties rarely painted and sett forth'. Rathgeb alludes to 'correct landscapes of all the most important and remarkable towns in Christendom'; while Gerschow refers presumably to this room when he says that he saw 'representations of the principal emperors and knights of the Golden Fleece, with the most splendid cities in the world and their garments and fashions'.

[1] Hatfield MSS. vol. 143, 59 is a memorandum in which hangings for lodgings 'over y^{e} new bedchamber' are mentioned.

[2] E 351. 3247.

[3] *Ibid.* 3249.

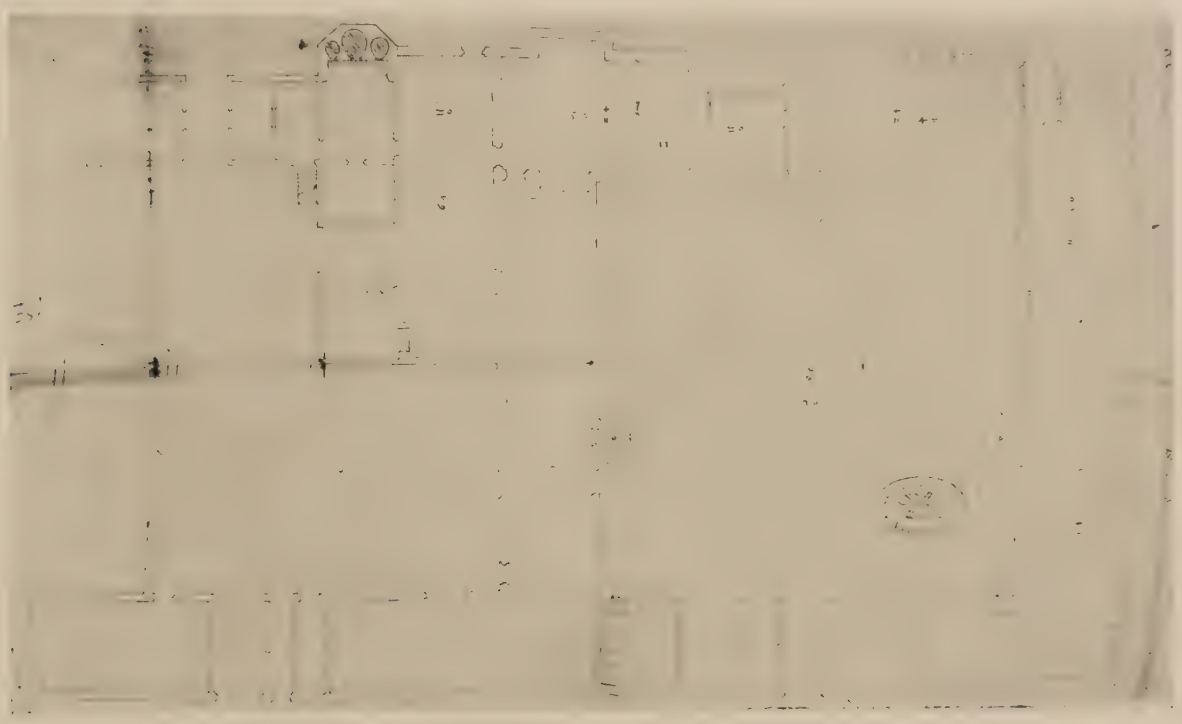
[4] The 'open room' is mentioned in Hatfield 143, (59).

[5] *Parl. Sur.* f. 7.

[6] See p. 114, n. 7, *ante*. Rye produces a copy of the sketch.

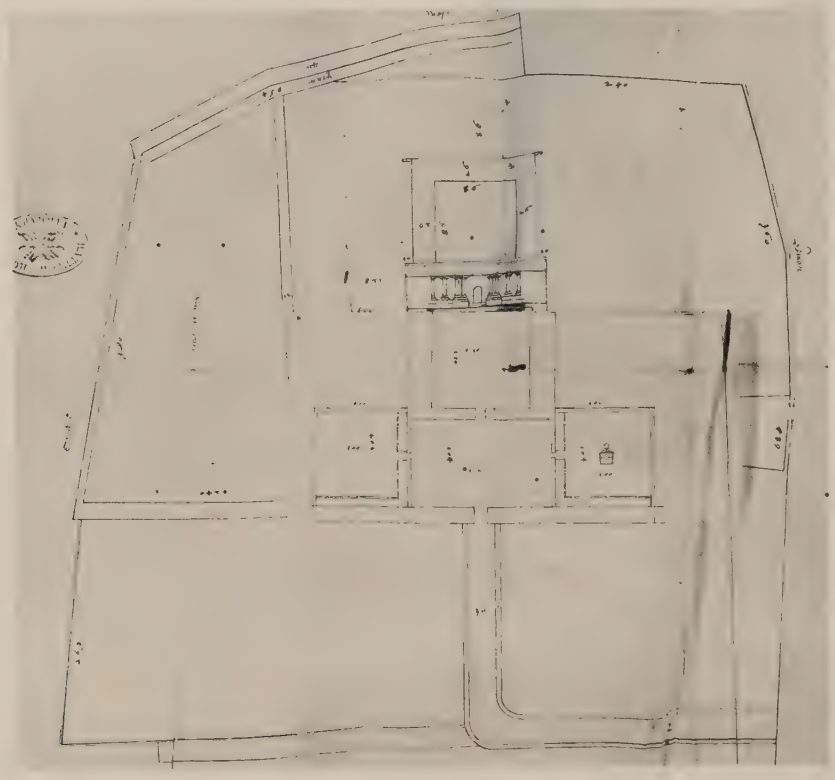
[7] *Parl. Sur.* f. 7.

a. Plan endorsed by Lord Burghley 'The first Grond platt of Thebalds'. Hatfield MSS., vol. 143, 24. *North to right*

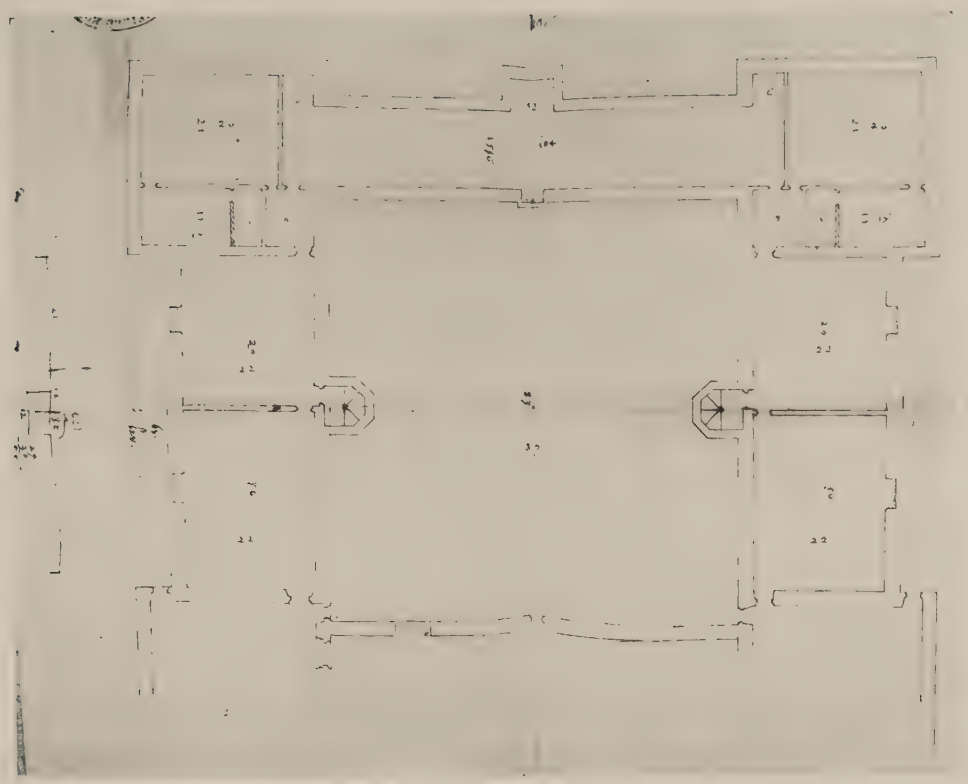


b. Plan endorsed by Lord Burghley 'platt of Thebalds' and 'A platt for to have reformd ye old house'. Hatfield MSS., vol. 143, 29 and 30. *North above*

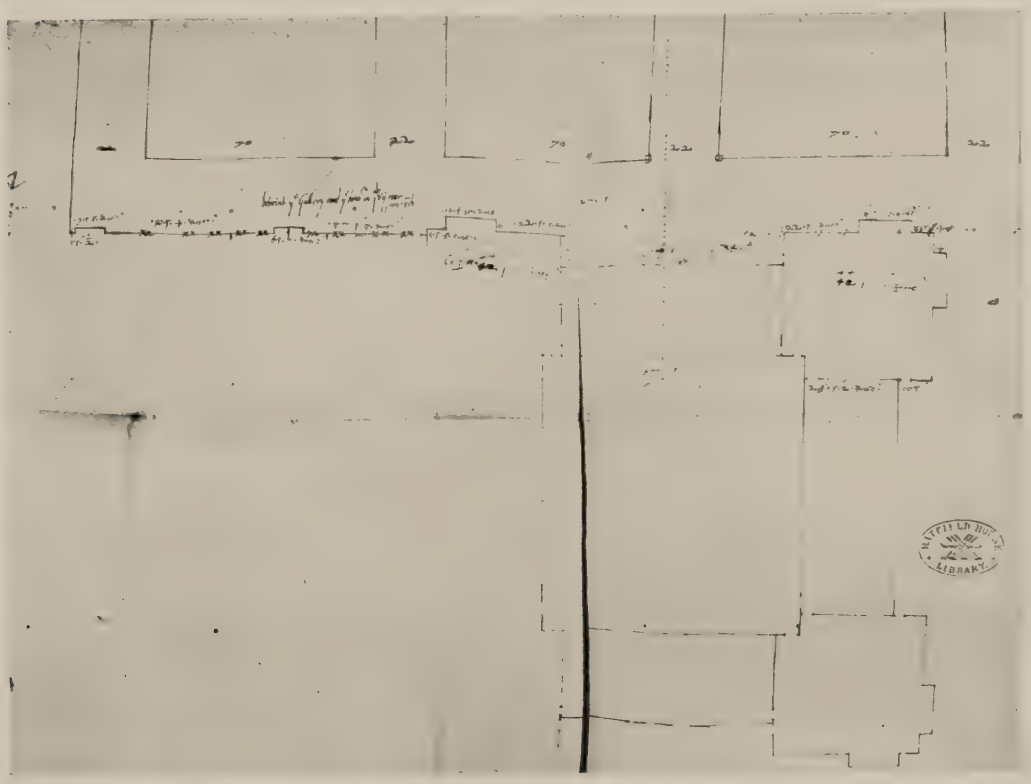
a. Plan endorsed by Lord Burghley 'The platt of ye whole house and ground att Thebalds'. Hatfield MSS., vol. 143, 27 and 28. Flap raised. *North to right*



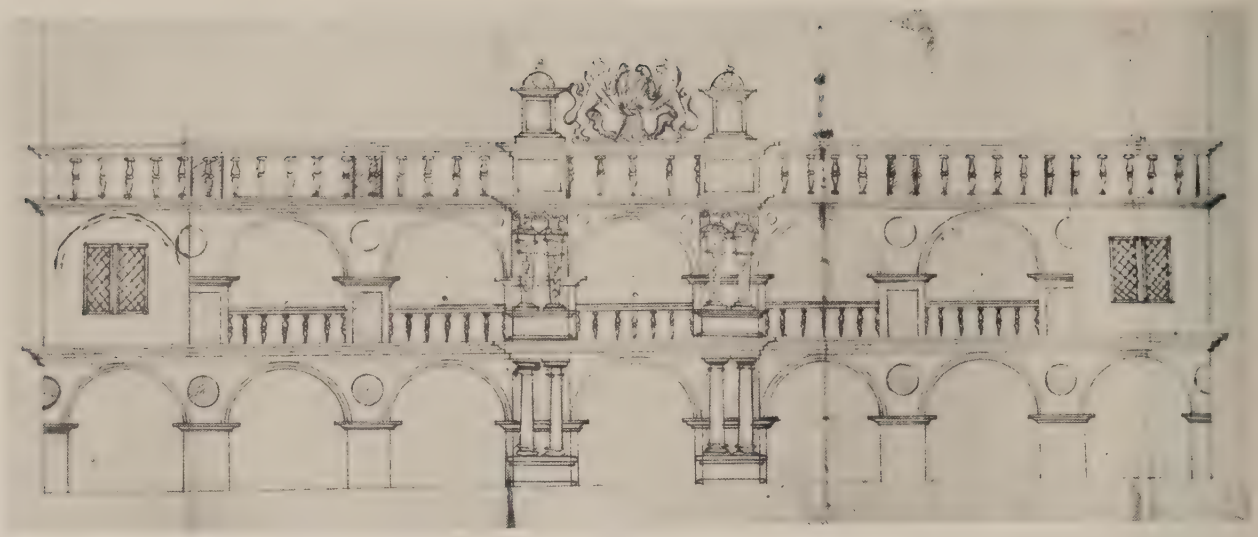
b. The same plan as above. Flap lowered



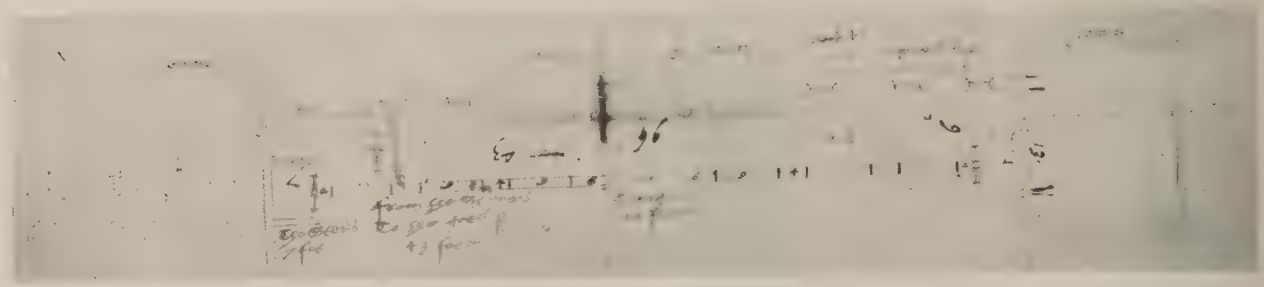
a. Plan endorsed 'The platt of Thebalds', to which Lord Burghley has added the date 1572 and 'by Hawthorn for ye Inner Court'. Hatfield MSS., vol. 143, 31 and 32. *North to right*



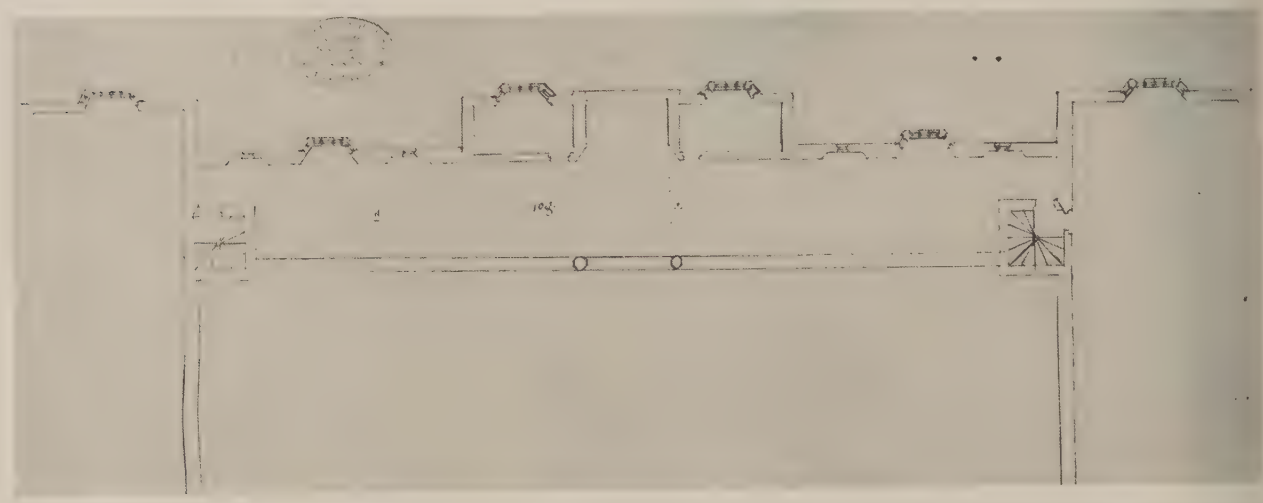
b. Plan endorsed by Lord Burghley 'The Platt of ye Garden towardes ye old house and ye long alley'. Hatfield MSS., vol. 143, 37 and 38. *North below*



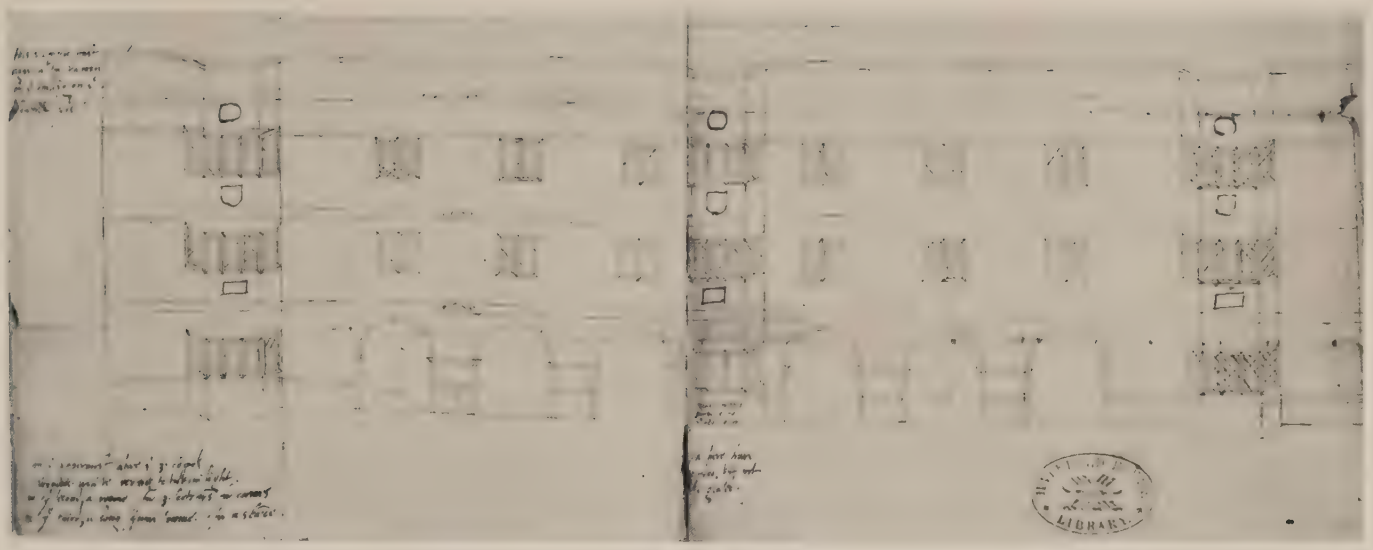
a. Elevation endorsed by Lord Burghley 'The inwd. syde of the gatehouse. voyd.' Hatfield MSS., vol. 143, 50



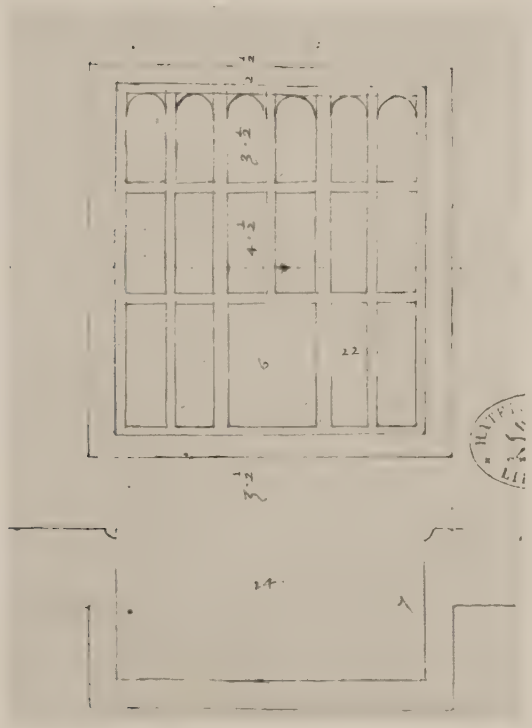
b. Plan endorsed by Lord Burghley 'The platt for my gatehowse at Theobalds'. Hatfield MSS., vol. 143, 46



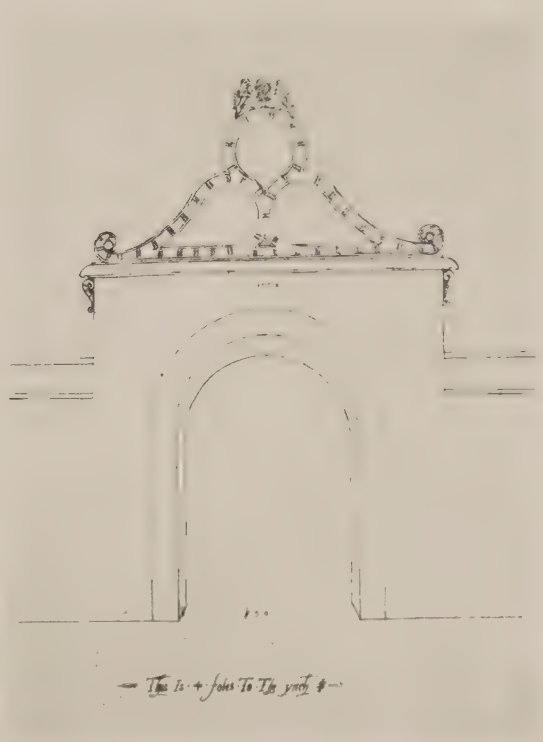
c. Plan endorsed by Lord Burghley 'The second platt of my gatehouse and gallery. *voyd.* ' Hatfield MSS., vol. 143, 48



a. Elevation endorsed by Lord Burghley 'upright of the gallery garden'. Hatfield MSS., vol. 143, 41 and 42



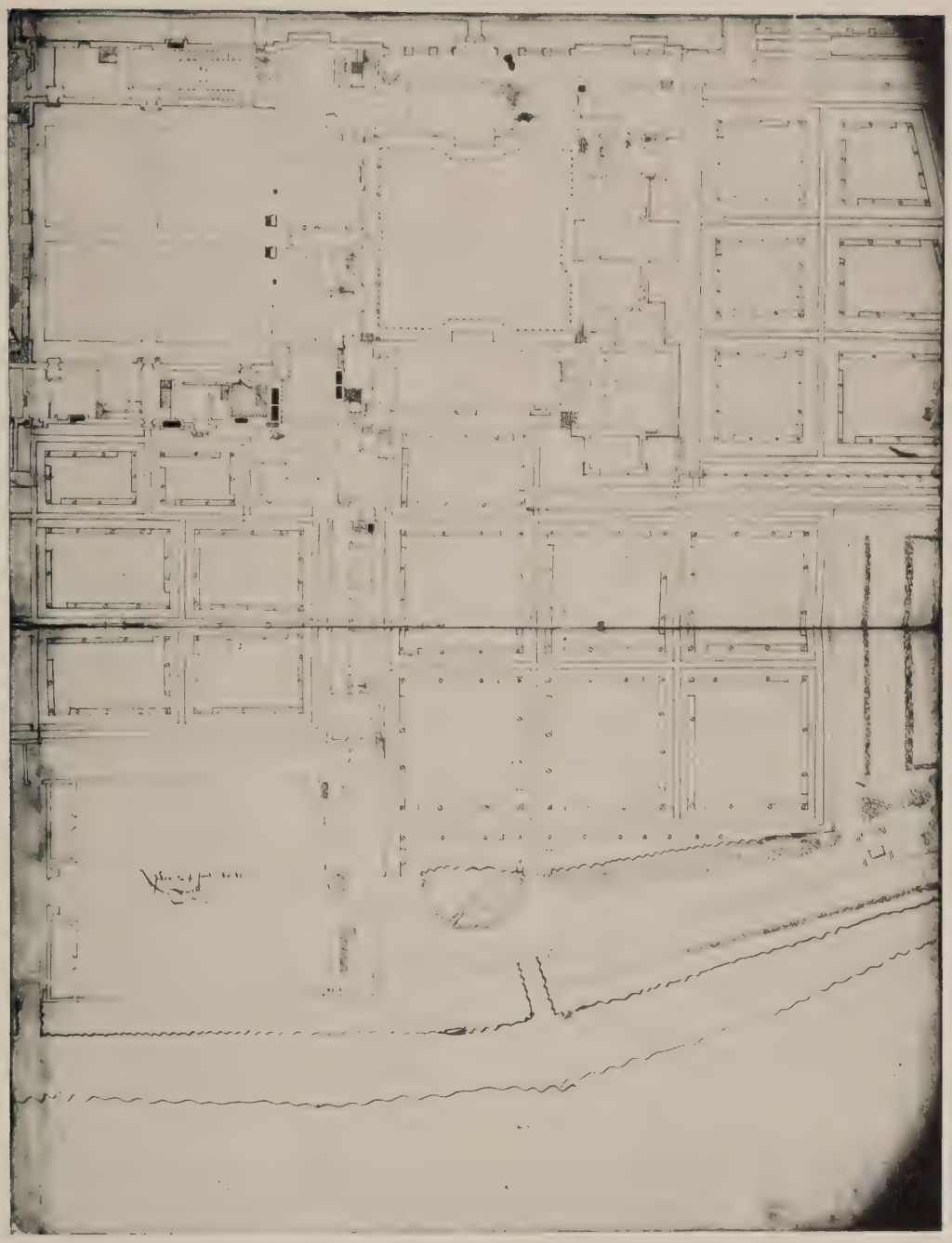
b. Elevation and plan endorsed by Lord Burghley 'a pattern for the wydd of the great chamber'. Hatfield MSS., vol. 143, 33



c. Elevation endorsed by Lord Burghley 'My othermost gate at Thebalds' and dated 1577. Monogram of John Symons. Hatfield MSS., vol. 143, 47

a. Section through the courtyard of a house; probably related to Theobalds. Sir John Soane's Museum: Thorpe drawings, p. 115

b. Plan of a house with two courtyards; probably related to Theobalds. Sir John Soane's Museum: Thorpe drawings, pp. 221, 222



Plan of the house and gardens at Theobalds. Sir John Soane's Museum: Thorpe drawings.
pp. 245–6. *North below*

Enlarged detail from a map of Theobalds park signed by John Thorpe, 1611. British Museum, Cotton, Aug. I, i. 75. (Size of this portion in original $6\frac{1}{4}$ in. $\times 4\frac{3}{4}$ in.)

A door at the north-west corner of the gallery led to a stair of thirty-two stone steps descending to the garden and emerging in front of a formal walk flanked by mulberry-trees. Another door led on to the flat roof of the North Parlour (the Council Chamber of Stuart times) which occupied most of the space between the towers on the north side of Conduit Court.

That completes the circuit of the state rooms round Conduit Court. In the upper parts of the towers were lodgings. In the ground-floor rooms along the west Robert Cecil had his lodgings in rooms which, perhaps, his father had designed for himself. The only other interiors of great interest were the Great Hall and the Green Gallery both of which were dealt with in passing earlier in this paper. The survey gives us the bare facts about most of the lesser rooms in the house, their chimney-pieces and wainscoting (if any) and the nature of the flooring; but there would be no point in cataloguing these details in a paper which aims only at a general architectural description. I am also deliberately excluding all accounts of the gardens, their planting, and ornaments—a subject of great interest in itself.

Apart from the great staircase, no separate fragments of Theobalds are known to exist. Part of one of the carved chimney-pieces was bought by Gough, the antiquary, during demolition, and retained by him at Forty Hill, Enfield, till 1834 when it passed to J. B. Nichols who removed it to a house in Hammersmith.[1] His son, J. Gough Nichols, described it in 1836 as ' two thirds of a group of figures in alto-relievo representing in the centre Minerva driving away discord, overthrowing idolatry, and restoring true Religion. The architecture is ornamented with garbs, or wheat-sheaves, from the Cecil crest. It is carved in Clunch, or soft-stone, probably by Florentine artists.' It is conceivable that such fragments as this still survive in houses within a reasonable radius of Theobalds. For example, a sixteenth-century stone fire-place at Glasgow Stud Farm, Enfield, illustrated in the ' Royal Commission on Historical Monuments ', *Middlesex* volume,[2] is clearly made up of displaced fragments in a style appropriate to Theobalds.

Theobalds passed out of the hands of William Cecil's son, the first earl of Salisbury, in 1607 when James I persuaded him to exchange it for the manor of Hatfield. At Hatfield the earl built the splendid house we know—a house whose design is full of allusion to Theobalds, in spite of a fundamental difference in plan. Theobalds thereupon became a royal palace and continued as such until it was sold by order of Parliament in 1650. Its architectural history during that time is of minor interest, the only considerable building operations being the creation of new livery kitchens, chaundry, stables, and other services, north and north-west of Buttery Court, in 1609–10, the erection of a brick wall all round the park, and Inigo Jones's contribution of a new Banqueting House in the grounds. The gradual dissolution of the house in the seventeenth, eighteenth, and nineteenth centuries is a long story most of which is told in the Victoria County History.

As a piece of architecture, Theobalds has been totally forgotten, yet I do not think it too much to claim that it was, with the possible exception of Longleat and Wollaton, the most important architectural adventure of the whole of Elizabeth's reign.

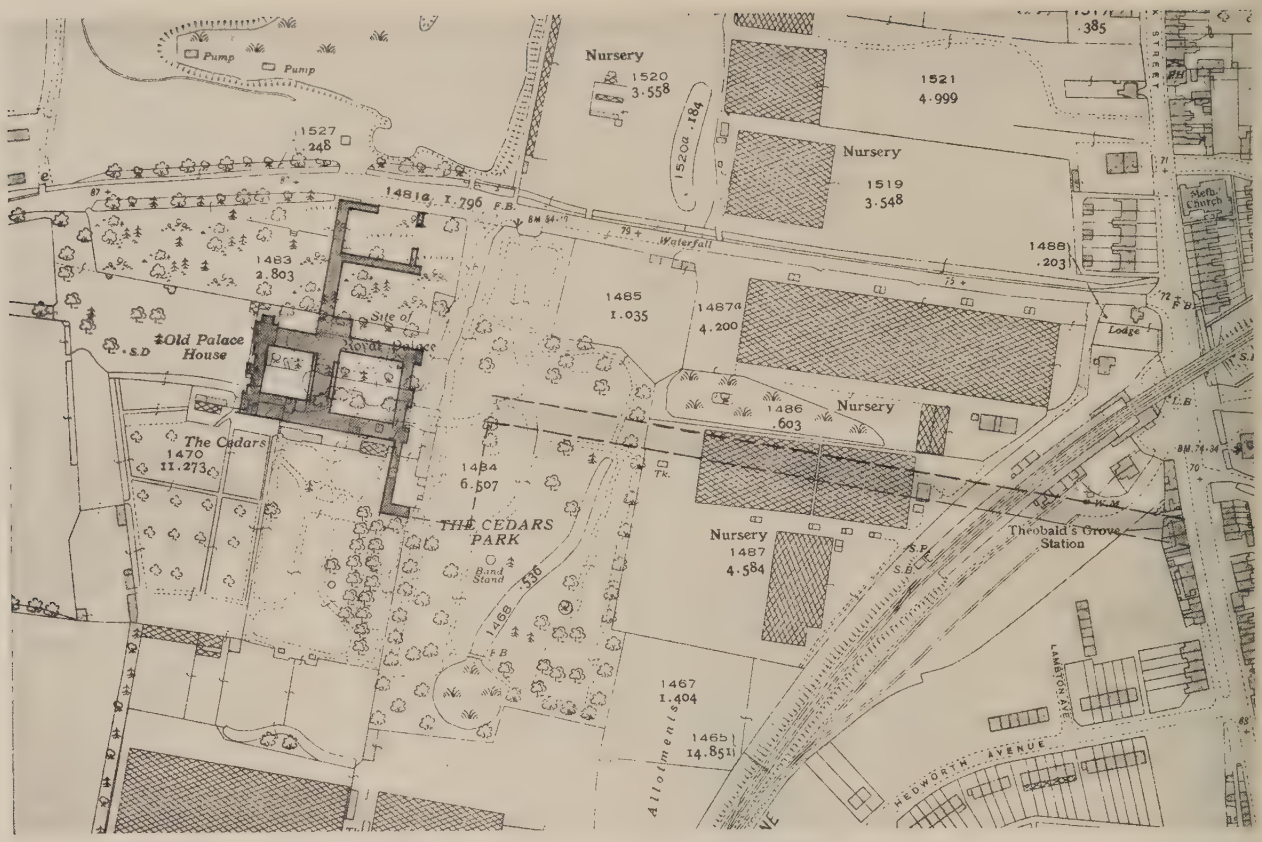
[1] *Gents. Mag.* 1836, p. 154. I am indebted to Mr. Mark Girouard for this reference.

[2] Pl. 36.

Certainly it was the most influential of all. Both Holdenby and Audley End directly derive from it. Hatfield has many echoes of it and so probably had the Earl of Northumberland's rebuilding of Sion. Castle Ashby, Apethorpe, and Rushton all owe it something; and so perhaps does Hardwick. Indeed, slight as our knowledge of the house must necessarily remain (unless some happy discovery enlightens us) I do not see that the history of Elizabethan architecture can properly be studied without a reconsideration of the part played and the example given by Theobalds.

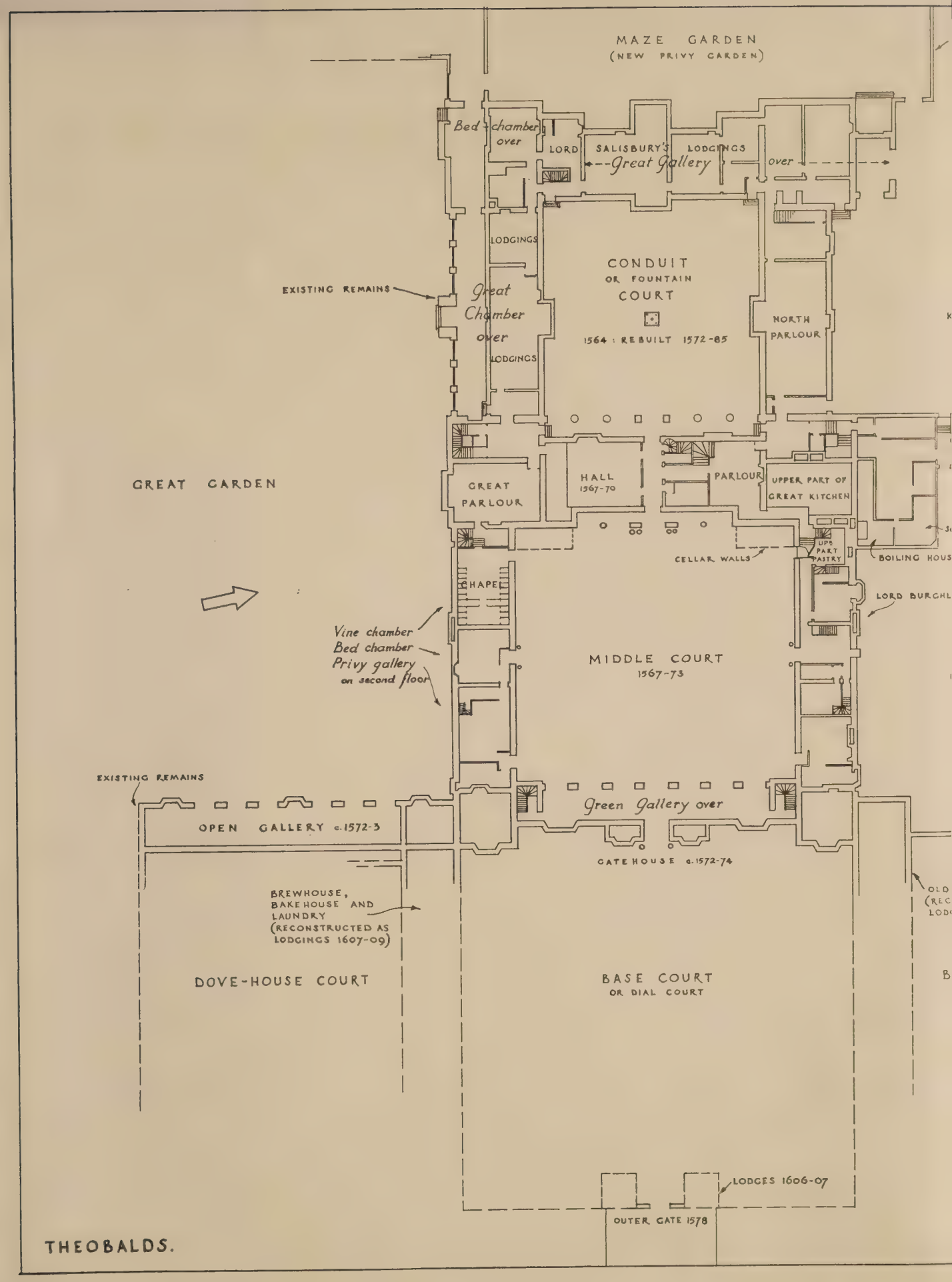
a. Stair supposed to have been taken from Theobalds, as re-erected in Theobalds Park House. From the sale catalogue of 1911 (Cheshunt Public Library)

b. The same stair as now existing at Herstmonceux Castle, Sussex. Photograph: *Country Life*

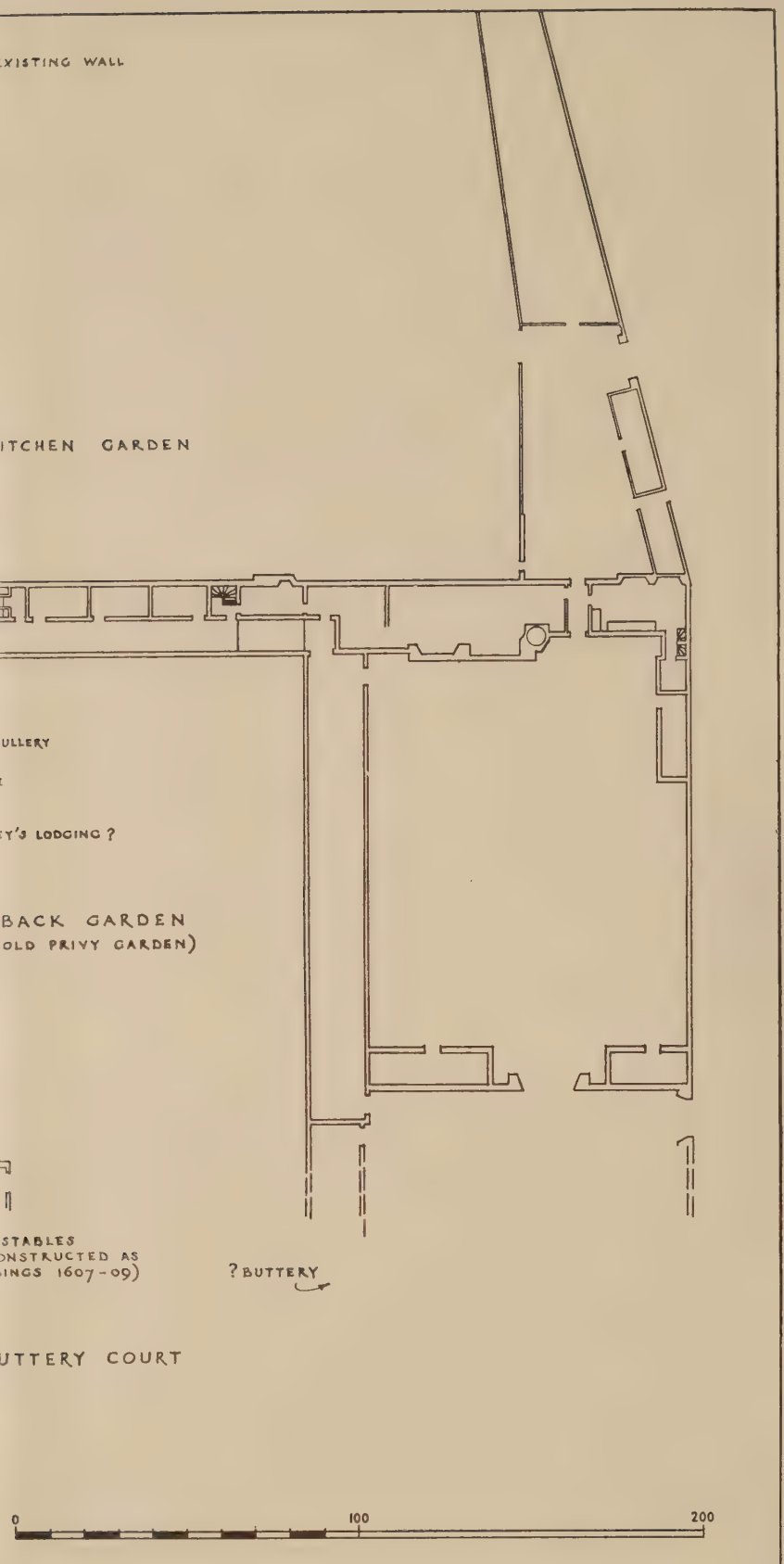


a. Plan of Theobalds imposed on the Ordnance Survey (1935 Revision) showing the siting of the house and, approximately, the line of the great walk. (Reproduced from the Ordnance Survey Map with the sanction of the Controller of H.M. Stationery Office. Crown Copyright reserved)

b. Sketch reconstruction of section through Middle Court (looking west) and section through great hall, showing probable arrangement of elements described in the Parliamentary Survey


MAZE GARDEN
(NEW PRIVY GARDEN)
Bed chamber over
LORD
SALISBURY'S LODGINGS
Great Gallery
over
LODGINGS
CONDUIT
OR FOUNTAIN
COURT
1564 : REBUILT 1572-85
EXISTING REMAINS
Great Chamber over
LODGINGS
NORTH PARLOUR
GREAT GARDEN
GREAT PARLOUR
HALL 1567-70
PARLOUR
UPPER PART OF GREAT KITCHEN
CELLAR WALLS
UPR PART PASTRY
BOILING HOUS
CHAPEL
LORD BURGHL
Vine chamber
Bed chamber
Privy gallery
on second floor
MIDDLE COURT
1567-73
EXISTING REMAINS
Green Gallery over
OPEN GALLERY c.1572-3
GATEHOUSE c.1572-74
BREWHOUSE, BAKEHOUSE AND LAUNDRY (RECONSTRUCTED AS LODGINGS 1607-09)
DOVE-HOUSE COURT
BASE COURT
OR DIAL COURT
LODGES 1606-07
OUTER GATE 1578

THEOBALDS.



PLAN BEFORE 1607 — *after John Thorpe.*

The Swan Badge and the Swan Knight

By ANTHONY R. WAGNER, Esq., C.V.O., D.Litt., F.S.A., Richmond Herald

[*Read 20th January 1955*]

The Rote is ded, the Swanne is goone,
The firy Cressett hath lost his lyght;
Therfore Inglond may make gret mone,
Were not the helpe of Godde almyght.[1]

THE scribe of these and the following lines, which lament the English disasters in France about 1449, had the kindness to insert the names of the noblemen, thus denoted by their badges. The Root, he tells us, for example, is *Bedforde*, the swan *Gloucetter*, and the cresset *Excetter*. This swan badge of Humphrey, duke of Gloucester, who died in 1447, is familiar, but he was by no means the only bearer of a swan in his time. It had been the badge of the great house of Bohun, earls of Hereford and Essex (pls. XXXVI, *g*; XXXVII, *d*; XL), and is assumed to have come to Humphrey through the marriage of his father the earl of Derby, later King Henry IV (pls. XXXVI, *f*; XXXVII, *g*; XL), with Mary de Bohun the younger daughter and coheir of Humphrey, earl of Hereford.[2] But even among Mary's own descendants Duke Humphrey was not alone in using it, for Henry V (pls. XXXIV, *a*, *b*; XL), Henry VI, and the latter's son Edward did so too. Mary's elder sister Eleanor (pls. XXXVII, *f*; XL) used it also, as did her husband, Thomas of Woodstock (pls. XXXIV, *c*, *d*, *e*; XL), duke of Gloucester, and the Staffords, dukes of Buckingham (pls. XXXVI, *a*, *c*; XL), descended from their daughter Anne.[3] Nor was this all, for in 1325 Margaret de Bohun (pls. XXXIX, *b*; XL), the daughter of an earlier Humphrey, earl of Hereford and Essex, had married Hugh de Courtenay, earl of Devon, and many of their descendants, Courtenays (pls. XXXIV, *f*, *j*; XXXVII, *h*; XL), Luttrells (pls. XXXVII, *a*, *b*, *c*, *e*, *i*, *j*; XL) and others (pl. XXXIX, *a*) used swans as badges, or as crests or supporters in their arms.

We cannot here trace the history of the badge in heraldry, but it must be remembered that the same beast, bird, monster, or other device might appear not only as its owner's badge on his retainers' liveries, but also as his crest upon his helm, and as the supporter of his shield or banner of arms. The word badge has thus a narrower and a wider meaning and in the present inquiry must often be taken in the latter.

Besides the families who derived a swan badge from the Bohuns, there were certain others who bore it, and chief among them the Beauchamps, earls of Warwick, who

[1] Rolls Series, 14 (ii), *Political poems and songs relating to English History, composed during the period from the accession of Edw. III to that of Richard III*, ed. Thomas Wright, 1861; p. 221, *On the Popular Discontent at the Disasters in France*, written *c.* 1448–9, from Cotton Rolls, ii. 23.

[2] See, however, p. 137 for evidence of use of the swan by Edward III. Our Fellow Mr. J. L. Nevinson informs me that the palace of the kings of Portugal at Cintra contained a room painted with swans, the Sala dos Cisnes, from the time of John I (d. 1433), the son-in-law of John of Gaunt. In its present, reconstructed form it is illustrated in pl. v (description on p. 87) of *Quatro Palavras Sobre Os Pacos Reais da Vila de Sintra*, by Raul Lino, Lisbon. I owe this reference to our Fellow Sir Thomas Kendrick.

[3] Pl. XL.

bore it for their crest (pls. XXXVI, *b*, *d*, *e*; XL). Sir Harris Nicolas, one of the few English antiquaries to deal in a scholarly way with heraldic problems, has some pertinent remarks on the swan badge in general and that of the Beauchamps in particular in his edition, published in 1828, of the poem of the *Siege of Carlaverock*. This poem, perhaps the work of a herald, describes the knights present at Edward I's siege of the castle of Caerlaverock in Dumfriesshire in 1300 and blazons their arms.[1] The description of Robert de Tony runs thus:

Blanche cote et blanches alettes
Escu blanc et baniere blanche
Avoit o la vermeille manche
Robert de Tony ki bien signe
Ke il est du chevalier a cigne.

'A white surcoat and white alettes, a white shield and a white banner, were borne with a red maunch by Robert de Tony, who well evinces that he is a Knight of the Swan',[2] or perhaps 'that he is from' or 'with the Knight of the Swan'.

Nicolas's comment must be quoted at length.

It is extremely difficult [he says] to explain the meaning of this allusion. According to the popular romance of the *Knight of the Swan*, the Counts of Boulogne were lineally descended from that fabulous personage, and genealogists of former ages have pretended to trace the pedigree of the houses of Beauchamp Earls of Warwick, Bohun Earls of Hereford, and Stafford Earls of Stafford and Dukes of Buckingham, from the same source, whence they say they derived their respective crests. It would not perhaps be difficult to deduce the descent of Robert de Tony from the Counts of Boulogne, and the accurate knowledge of genealogy which the Poet has displayed in his account of Lord Clifford, justifies the idea that he referred to Tony's pedigree, an opinion which is further supported by the fact of the shield, on his seal affixed to the Barons' letter to the Pope in the year 1301 [pls. XXXVII, *k*; XL], being surrounded by lions and *swans* alternately.[3] But it must not be forgotten that a custom then prevailed for Knights to make their vows of arms 'before the swan'. 'The ceremony of conferring knighthood upon Edward Prince of Wales in 1306', Mr. Palgrave observes, 'was performed with great splendour. While they were sitting at the feast, the minstrel entered, gaily attired, and required of the knights, but principally the younger ones, to make their vows of arms before the swan.' . . . Although Tony might on a former occasion have made his vows 'before the swan,' it does not explain why he only of the Poet's heroes should have been described as a 'Knight of the Swan', and still less why he should have assumed that badge on his seal, since the ceremony must have been common to the whole of the chivalry of the period. As Guy de Beauchamp, Earl of Warwick, married Alice, the sister and heiress of Robert de Tony, that family became doubly descended from the 'Knights of the Swan', if the invaluable distinction was possessed by the Baron.[4]

To catch the hares started by Nicolas in this passage will take us all our time. We must first identify the 'genealogists of former ages' who, he says, derive the pedigree of the Beauchamps, Bohuns, and Staffords from the Swan Knight. His reference proves to be to a sixteenth-century copy[5] of the Latin version of the roll of the earls

[1] A. R. Wagner, *Catalogue of English Mediaeval Rolls of Arms*, 1950, p. 29.
[2] *Siege of Carlaverock*, ed. Nicolas, pp. 42–43, 249.
[3] This seal bears the legend CHEVALER AU CING.
[4] *Op. cit.* pp. 369–70.
[5] 'Ashmole's MSS. Dugdale G. 2', i.e. Bodleian MS. Dugdale G. 2, see *Catalogue of English Mediaeval Rolls of Arms*, p. 117. The text of the original is now in many places illegible, but I have been kindly allowed by Sir William Dugdale, Bt., to examine the beautiful transcript made by his namesake and ancestor in 1636.

of Warwick, written and drawn between 1477 and 1485 by John Rous, the Chantry Priest of Guy's Cliffe, of which the original is in the College of Arms. Rous tells us that Rohaudus, first Saxon earl of Warwick and ancestor of the later earls, was himself descended from Eneas, called the knight of the swan, a king's son, the eldest of six brothers and sisters born at one birth, of whom the rest were changed by enchantment into swans with collars and chains of gold. He then gives a highly condensed version of the Swan Knight legend, mentioning the wicked grandmother Mattabrune, and ending with the information that the earls of Warwick, Hereford, and Stafford were descended from this Eneas and therefore bore the swan as their crest, and that of the earls of Warwick and Stafford one possessed a cup and the other a cover made from the gold collars and chains of the swans. From the cup, belonging to the earls of Warwick, Rous tells us that he himself has drunk of the best wine in Warwick castle, in the chamber there of the Countess Anne, sister and at length heir of Henry, duke of Warwick.[1] We must consider the Swan Knight legend later, but it may here be observed that its hero, whom Rous calls Eneas, is in the French versions Helias. 'The cup of the swan' was bequeathed to his son Richard by Thomas Beauchamp, earl of Warwick, in his will of the 1st of April 1400.[2] I have sought in vain for other references to it or to the cover in the possession of the earls of Stafford, but I hope that such may yet come to light. Rous's drawing of Eneas (pl. XXXVIII, *b*) shows him holding the cup, 'a rich jewelled vessel', as Sir Thomas Kendrick says, 'with the sacred monogram on the print'.[3]

The Staffords still cherished the legend thirty years later (pls. XXXVI, *a*, *c*; XL), for in 1512 Robert Copland translated from the French and Wynkyn de Worde printed, 'the history of the noble Helyas Knight of the Swanne' at the instigation of Edward Stafford, duke of Buckingham, who according to the prologue was descended from Helyas. Bishop Percy, writing of Copland's book in 1765, calls this 'A curious picture of the times! While in Italy literature and the fine arts were ready to burst forth with classical splendor under Leo X. the first peer of this realm was proud to derive his pedigree from a fabulous KNIGHT OF THE SWAN.'[4]

Since this version of the story (like many others) makes Ydain, the Swan Knight's daughter, the wife of Eustace, count of Boulogne, and mother of Godfrey of Bouillon, it is natural to suppose that it was through this house that the Staffords claimed their descent. John Gough Nichols, however, who wrote at length and with great learning of the swan badge, in an article on 'Collars of the Royal Livery' in the *Gentleman's Magazine* in 1842,[5] though aware of this evidence, and more besides, professed himself unable to determine whether the Bohuns and Staffords really partook of the blood of the counts of Boulogne and thought it more probable that their first assumption of the swan proceeded from some other distinct origin. He was fortified in this view by a mistaken belief that Robert de Tony's mother was Alice, daughter of Humphrey de Bohun, earl of Hereford and Essex (d. 1275), than whom accordingly no earlier common ancestor need be sought of all the English swan families. It has, however,

[1] Rous Roll, ed. Courthope, 1859, no. 18 and introduction. Anne was countess of Warwick from 1449 to 1493.
[2] *Testamenta Vetusta*, p. 153.
[3] *British Antiquity*, 1950, p. 24.
[4] *Reliques of Ancient English Poetry*, 2nd ed. 1767, vol. ii, pp. 272–3.
[5] 1842, pp. 353–69.

now been shown that though there was indeed a contract of marriage between Roger de Tony and Alice de Bohun in 1239, when the former was three years old, the mother of Roger's son Robert was not Alice but a certain Isabel.[1] I am myself convinced that we must look to the counts of Boulogne, who, as I shall show, were ancestors both of Bohun and of Tony, for the common origin of the English swan badges. But the argument must be founded on an examination of some part of the continental background of the Swan Knight legend.

It seems to be agreed that the legend of the Swan Knight proper and the legend of the Seven Children changed into Swans were originally distinct folk tales, but about the middle of the twelfth century were linked together and the latter made the introduction to the former.[2] The plot of the former in its earliest version, the *Chanson du Chevalier au Cygne et de Godefroi de Bouillon*, is thus summarized by Todd.[3]

> Otto, being Emperor at Nimwegen, is appealed to by the widowed Duchess of Bouillon and her daughter Beatrice, for his protection against the threatened usurpation of Renier, Duke of Saxony. At the same moment there arrives on the river an unknown knight, in a boat which is drawn in tow by a white swan. The 'Knight of the Swan' disembarks, undertakes the defense of the duchess and her daughter, slays the usurper, and marries Beatrice, imposing upon her, however, an oath never to question him as to his birth or antecedents, with the warning that her first indiscretion in this matter will result in their certain separation. A daughter, Ida, is born to the couple thus united; but by the time she has reached the age of seven years, the mother's curiosity can no longer be restrained and she propounds to her husband the fatal question. At this the knight, in sorrowful obedience to his destiny, bids farewell to his vassals, recommends his daughter to the Emperor, and repairs to the shore, where the swan that first brought him to that land is awaiting him with his boat; and the knight, departing as he came, disappears never to be heard of more. Ida, having attained her fourteenth year, is married by the Count Eustace of Boulogne, and from this union spring three sons, Godfrey, Eustace and Baldwin, that is to say, our Godfrey of Bouillon and his two distinguished brothers.

The tale of the Seven Children changed into Swans has come down in many versions, a number of them, including those of Grimm[4] and Hans Andersen, entirely self contained and unconnected with the tale of the Swan Knight. The main outlines of the form which here concerns us are, however, as follows.

A king, hunting in the forest, meets and marries a nymph, who bears him seven children at one birth, six sons and one daughter, with golden chains round their necks. The nymph dies and in the king's absence on campaign his wicked mother orders her servant to take the children into a forest and abandon them. He, however, leaves them by the window of a hermit, who cares for them. Seven years later the wicked queen learns that the children are living, and sends a messenger who with sharp scissors cuts the chains from the necks of the boys while they sleep. They are thereupon changed into swans and fly away to a pond or river in the royal domains. Later the queen has one of the golden chains melted down to mend a broken cup. Meanwhile the little

[1] *Complete Peerage*, vol. xii, pt. i, 1953, p. 772.

[2] *Romania*, xix, 1890, p. 326. Gaston Paris on Todd, *La Naissance du Chevalier au Cygne*.

[3] Henry Alfred Todd, 'La Naissance du Chevalier au Cygne ou les enfants changés en cygnes'. Publications of the Modern Language Association of America, vol. iv, Baltimore, 1889.

[4] For a full discussion and bibliography see *Anmerkungen zu den Kinder u. Hausmärchen der Brüder Grimm*, ed. J. Bolte und G. Polivka, Leipzig, 1933, Band I, no. 49, pp. 427–34.

girl remained hidden and with her golden chain kept her human form. Through her the king at length learns the truth. His mother repents and restores the chains and the swans are changed back into human form all save the one whose chain was melted down into the cup, who must remain a swan. In the versions which so ingeniously link this tale with that of the Swan Knight four of the brothers then go forth to seek their fortunes, but the fifth, the Swan Knight, will not leave his enchanted brother and they set out together, the swan towing the Swan Knight in his boat. So after sixty days they come to Nimwegen.

An early form of this story is told about 1190 by the monk John of the abbey of Haute Seille (Alta Silva) in his Latin romance, Dolopathos.[1]

In the French poetical version of about the same date, edited by Todd, the king is called Lothair or Lotier, the nymph Elioxe, and the wicked queen Matrosilie. In another version, thought by Gaston Paris to go back also to the twelfth century, the king is named Oriant, his wife Beatrix, and his mother Matabrune, and the Swan Knight Helias.[2]

If we accept the view of Gaston Paris that the Swan Knight story was familiar from an early date in Lotharingia, it will not be hard to understand how the courtly poets and chroniclers of the twelfth and thirteenth centuries came to attach it in different forms to the mythical origins of one or another ruling house in that region. Godfrey of Bouillon (pl. XL) was in fact the son of Eustace II, count of Boulogne, by Ida, sister of Godfrey, the last duke of Lower Lotharingia of the house of the counts of Ardennes, and was himself invested with the dukedom by the Emperor Henry IV in 1089. After his death in 1100, however, the dukedom became merely titular and Lower Lotharingia separated into its component principalities, of which the chief were the duchies and counties of Brabant, Limburg, Luxemburg, Hainault, Namur, Looz, Holland, Guelders, Jülich, and Cleves. Their ruling houses were much intermarried and all had descents of some kind from the old dukes of Lower Lotharingia.

The *chansons de geste* celebrating the first Crusade, in which Godfrey of Bouillon had naturally a hero's part, were being written before the middle of the twelfth century and the poems recounting his origin and earlier history were a natural and not much later development. William of Tyre, writing his History of the Crusade about 1190, refers to the fable of the Swan from whom according to vulgar report Godfrey and his brothers were descended.[3] The oldest version of the poem, summarized above, is probably as old as this and other versions of the story follow, both in verse and prose.[4]

Godfrey's encomiasts, however, were not allowed to monopolize the Swan Knight. Wolfram von Eschenbach introduced him into his Parzifal,[5] begun before 1203, under the name of Loherangrin (contracted in later versions of this story to Lohen-

[1] Ed. Oesterley, 1873.

[2] G. Huet discusses the relationships and origin of these early versions in *Romania*, xxxiv, 1905, 206–14.

[3] *Recueil des Historiens des Croisades*, tome i, Paris, 1844, p. 371. 'Praeterimus denique studiose, licet id verum fuisse plurimorum astruat narratio, Cygni fabulam, unde vulgo dicitur sementivam eis fuisse originem, eo quod a vero videatur deficere talis assertio.'

[4] *Monuments pour servir à l'histoire des provinces de Namur, de Hainaut et de Luxembourg, recueillis et publiés pour la première fois par Le Baron de Reiffenberg*, Bruxelles, 1846; tome iv. Deuxième Division. *Légendes Historico-Poétiques. Le Chevalier au Cygne et Godefroid de Bouillon*, tome i, Introduction.

[5] Reiffenberg, *op. cit.* p. 205, from C. Lachmann's edition, 1833, p. 387.

grin) and by making him a son of Percival attaches him to the Arthurian cycle. Even so the same Loherangrin suggests its Lotharingian origin, being a contraction of Loherain Garin, that is Garin of Lorraine, one of the heroes of the 'Geste des Loherains'. Later in the century Konrad von Würzburg (d. 1287) in his *Schwanritter* makes a nameless Swan Knight rescue and marry the widow not of the duke of Bouillon but of Godfrey, duke of Brabant, and from them, he says, descended several noble lines, the dukes of Guelders, the dukes of Cleves, and the counts of Rheineck.[1]

Nowhere did the Swan Knight (pls. XXXVIII, *a*; XL) legend take deeper root than in Cleves, where the ducal Schloss above the Rhine is still the Schwanenburg and the Lohengrin monument of 1882 adorns the market place. Adolf the younger son of Duke Adolf of Cleves, who had built or rebuilt the Schloss in 1431,[2] was at Lille on the 17th of February 1453, when his uncle Philip the Good, duke of Burgundy, gave one of his most splendid feasts there. This, as usual, started with a joust, which was proclaimed at a noble banquet given by Adolf of Cleves, and the proclamation was that the Knight of the Swan, servitor of ladies, would encounter all comers at the joust, and the knight who should perform best there in the judgement of the lords and ladies would win a rich swan of gold, chained with a golden chain, and at the end of the chain a ruby.

At this same banquet, Olivier de la Marche tells us, most of the length of the principal table was occupied by a ship in full sail, in which stood an armed knight wearing a coat of the full arms of Cleves; and in front of the ship was a swan of silver with a golden collar and long chain with which he drew the ship; and at the end of the ship was a castle, richly wrought, at the foot of which a falcon floated in a great river. And I was told, says Olivier, that this represented how miraculously of old time a swan brought in a ship by the river Rhine to the castle of Cleves a very virtuous and valiant knight who married the princess of the country and by her had issue of whom sprung the dukes of Cleves even to this day.[3]

Favine[4] and others assert that the dukes of Cleves founded an Order of Knighthood of the Swan, but I have seen no evidence for anything more than a *devise* or livery collar, comparable with the Collar of SS. of the house of Lancaster and the Yorkist collar of suns and roses. Olivier de la Marche makes clear the distinction between a true Order of Chivalry, like the Garter or the Golden Fleece, with a limited number of members who meet in a chapter, on the one hand, and a *devise* or decoration, on

[1] *Kleinere Dichtungen Konrads von Würzburg*, herausgegeben von Eduard Schröder, Berlin, 1925. II. 'Der Schwanritter', p. 38, ll. 1320–3.

von Gelre beide und ⟨ouch⟩ von Cleven
die grâven sint von in bekomen,
und wurden Rienecker genomen
ûz ir geslehte verre erkant.

[2] Dr. Paul Adam-Even of Paris has drawn my attention to a painting of the arms of this Duke Adolf of Cleves (d. 1448), supported by a swan, in the armorial of John of Luxemburg by the herald Hainault: Brussels, Bibliothèque Royale, MS. 6567, p. 220.

[3] *Mémoires d'Olivier de la Marche*, pub. pour la Soc. de l'histoire de France, par Henri Beaune et J. d'Arbaumont, tome ii, 1884, pp. 341–2.

[4] André Favine, *Le Theatre d'honneur et de chevalerie*, Paris, 1620 (English translation, A. Favine, *The Theater of Honour and Knighthood*, printed by William Jaggard, London, 1623, bk. vii, chap. xi, pp. 248–57), gives the Swan Knight legend and the genealogy of the house of Cleves from Helias and Beatrix of Cleves, through their eldest son Thierry, count of Cleves, their second son being 'Godfrey, Counte of Lotier'. No details are, however, given here of the *foundation* of the Order. Dr. Paul Ganz in his important article in the *Archives Héraldiques Suisses*, 1905–6, 'Die Abzeichen der Ritterorden und Turniergesellschaften', accepts the Order of the Swan as an order, but his data seem really to indicate a livery collar.

the other, such as a sovereign may give to a larger and indefinite number of knights, esquires, and ladies, who may form a *confrairie*, but not an order.[1]

Duke John I (d. 1481), the elder brother of Adolf, used swans for his supporters,[2] and his younger son, Engelbert (d. 1506) (pl. XL) count of Nevers, seems to have been the first of his house to take the swan for his crest in place of buffalo horns.[3]

The cult of the Swan Knight continued unabated in this branch of the house of Cleves for a book now in Paris thought to have been painted for the marriage of Henry, Prince de Condé, to Mary of Nevers in 1572 shows their whole descent from the Swan Knight,[4] and it is said too that her nephew Charles Gonzaga, duke of Nemours and Mantua (pl. XL), wished to re-establish the supposed Order of the Swan in 1615.[5]

The real Order of the Swan was that of Brandenburg, founded there in 1443 by the Margrave Frederick II. In 1485 a separate South German branch was established at Ansbach by the Elector Albert Achilles, with its chapel there in the church of St. Gumbert, where the monuments of the knights show the collar of the order (pl. XXXV, *h*), with a swan below the figures of the Virgin and Child.[6] An original fifteenth-century collar of this order exists, which belonged to Peter Rot of Bâle. It has been assumed that the Order had reference to the Swan Knight, but I have seen no good evidence of this, and the statutes of 1443 explain the free, unconquered swan, 'called Frank', merely as an emblem of freedom,[7] though it is true that its founder was great-grandson of the marriage of John II of Brandenburg (pl. XL) (d. 1357) to Elizabeth, daughter of Berthold of Henneberg by Adela, daughter of Henry I, Landgrave of Hesse, younger son of Henry II, duke of Brabant (d. 1248).

This Order of the Swan disappeared when the house of Brandenburg adopted the reformed religion in 1525, but the marriage of Albert Frederick of Brandenburg to Mary Eleanor, sister and heir of John William, duke of Cleves, who died in 1609, gave the Hohenzollerns a new and more important descent from the Swan Knight. In 1780 the parish priest of Laerne in Flanders, Antoine François le Paige (pls. XXXV, *i*; XXXVI, *h*), who claimed descent from the counts of Bar-sur-Seine and styled himself count of Bar, printed at Bâle a history of the hereditary Order of the Swan or Sovereign Order of Cleves,[8] which combines with much recondite information the totally baseless assertion that this order was founded in 1290 by Emperor Rudolf of Hapsburg and consisted of twelve knights, whom the author names and in whose descendants he considers membership of the order hereditary. By similar reasoning he concluded that the present Grand Master (in 1780) was Frederick the Great.

In 1843 King Frederick William IV of Prussia celebrated the five hundredth anniversary of his ancestor's foundation of the Schwanenorden by founding a new one, but whether this had reference also to the Cleves connexion I do not know.

[1] *Mémoires*, tome iv, pp. 161–3.
[2] W. Ewald, *Rheinische Siegel.*
[3] J. Roman, *Inventaire des sceaux des pièces originales du cabinet des titres*, Paris, 1920, no. 3258.
[4] Bib. Nat. MS. fr. 24,182.
[5] *Chev. au Cygne*, ed. Reiffenberg, p. xxxiii.
[6] Ganz, *op. cit.* fig. 10.
[7] Sir Bernard Burke, *The Book of Orders of Knighthood*, 1858, p. 212; Count Stillfried-Rattonitz & Hänel, *Das Buch vom Schwanenorden*, Berlin, 1881.
[8] *Histoire de l'Ordre héréditaire du Cigne, dit l'Ordre Souverain de Clèves. Ou du Cordon d'Or*, par M. le Comte de Bar, A Bâle, et se trouve A Clèves, chez Hoffman, MDCC.LXXX. The only copy I have located in this country is in the Bodleian Library.

Almost as persistent as that of the house of Cleves was the Swan badge of the counts of Boulogne. Horace Round[1] has traced the history of the great English estates of the counts of Boulogne from the father of Godfrey of Bouillon, Count Eustace II (pl. XL), whose first wife was the sister of Edward the Confessor, and who was with the Conqueror at Hastings. His son, Count Eustace III, left an only child Maud, countess of Boulogne in her own right, who became queen of England as the wife of King Stephen, the Conqueror's nephew. Round argues that the possession of her lands, which with his own had made him perhaps the greatest landowner in England, before Henry I's death, probably helped to induce him to agree to Henry II's succession to the Crown in place of his own son William. Stephen's surviving son William, count of Boulogne, died without issue five years after his father, in 1159, and his heir was his sister Mary, who by her husband, Matthew of Flanders, left two daughters, Ida, who married Reynaud son of Count Aubrey of Dammartin, and Maud, the wife of Henry I, duke of Brabant. Reynaud of Dammartin, poised uneasily between the kings of France and England, ended by losing his possessions in both countries. The county of Boulogne was confiscated by Philip of France in 1212. Reynaud's issue became extinct on the death of his granddaughter in 1251 and not long after this the county of Boulogne was secured by Robert, count of Auvergne, whose mother was a daughter of Henry I, duke of Brabant, by Maud of Boulogne the younger sister of the Countess Ida, Henry III of Brabant, Maud's heir, having parted with his rights in Boulogne to his cousin Robert. It seems, however, that a counterclaim was made by Reynaud's nephew Mathieu de Trie, count of Dammartin, for the counts of Dammartin later used the *cri* 'Boulogne'[2] and an English Roll of arms of about 1275 gives arms for 'Le Countie Dammartin de Beleigne',[3] which are in fact those of Reynaud de Trie, count of Dammartin. It is possible that this rested on a misapprehension of the pedigree and a mistaken belief that these and other Dammartin cadets were descended from the marriage with Ida of Boulogne—a point, as I shall suggest later, of some importance.

The counts of Boulogne of the house of Auvergne displayed swans in their heraldry from the middle of the fourteenth century (pl. XL). Count John I (pl. XXXV, *e*) bore a swan as crest from 1351,[4] as did his son John II (pl. XXXV, *d*) (d. 1394), and the latter's son-in-law Jean, Duc de Berry (pls. XXXIV, *h*; XXXV, *a*, *b*, *c*, *f*) (d. 1416).[5] King John of France,[6] who married Jeanne of Auvergne, and Jeanne's first cousin Marie, countess of Auvergne and Boulogne[7] (d. 1437), both bore two swans as supporters, as did John's great grandson John, count of Angoulême (pl. XXXIV, *g*) in 1445; while Marie's grandson, Bertrand de la Tour, count of Auvergne[8] (d. 1494), and his nephew Jean, sieur de Montgascon[9] (d. 1483), bore swan crests.

[1] *Studies in Peerage and Family History*, 1901, iii, *The Counts of Boulogne as English Lords*.

[2] Armorial de Sicile-Urfé, no. 2789.

[3] Walford's Roll, no. 71; cf. *Armorial de France composé à la fin du XIII^e siècle ou au commencement du XIV^e*, ed. Max Prinet, 1920, no. 33.

[4] Douet d'Arcq, *Collection des sceaux des archives de l'Empire*, Paris, 1863–8, no. 564; G. Demay, *Inventaire des sceaux de la collection Clairambault*, Paris, 1885–6, no. 6336. I am much indebted to my friend Dr. Paul Adam-Even of Paris for help and information in regard to these examples and to my friend Baron Meurgey de Tupigny of the Archives Nationales for help in identifying and obtaining photographs of seals there.

[5] Demay, *op. cit.* no. 473.

[6] Douet d'Arcq *op. cit.*

[7] Baluze, *Histoire d'Auvergne*, p. xx.

[8] Douet d'Arcq, *op. cit.* no. 396.

[9] Baluze.

Several continental families who bore swans can probably be linked to one or other of these lines; for example the counts of Arkel, one of whom married a Cleves heiress in the fourteenth century; the dukes of Holstein, descended from the Landgraves of Hesse and the dukes of Brabant (a coat for their county of Stormarn *Gules a swan argent gorged with a crown or* appears among the quarterings of the king of Denmark, first appearing on the seal of King Christian I in 1476[1]); and the counts of Limburg-Styrum, for whom a pedigree was painted about 1750 showing their descent from the Swan Knight through the counts of Cleves and Altena.[2]

But it is time to come back to England and consider how our swan badges here fit into the pattern we have established. We have seen that in the twelfth century two ancient legends were combined into a romance which was annexed to the ancestry of the counts of Boulogne and the dukes of Cleves whose fourteenth- and fifteenth-century descendants adopted swans in their heraldry. Can we ascertain how and when the Swan Knight legend came to England and can we show that the English swan badge families had links with those of the continent?

There can, I think, be no doubt of the answer to the first question. The connexion of the counts of Boulogne (pl. L) with England goes back to the father of Godfrey of Bouillon, Count Eustace II (d. *c.* 1090), whose first wife was a sister of Edward the Confessor, while his own and successor Eustace III was with the Conqueror at Hastings and became a great English landowner. His daughter and heir Maud married Stephen of Blois the Conqueror's nephew to whom she brought the county of Boulogne in France and the honour of Boulogne in England, thus making him the greatest of English landowners before at his uncle's death he claimed the crown. King Stephen founded Faversham Abbey and an extract from a book of that abbey entered in the Red Book of the Exchequer[3] seems to contain the earliest English reference to the Swan Knight story. Internal evidence[4] suggests that the Faversham book was written soon after 1200, while Hubert Hall[5] concluded that the entry in the Red Book was made between 1251 and 1253. In this brief Latin narrative the Swan Knight himself is nameless. He rescues the widow of Godfrey of Bouillon, surnamed Alakete, from the attack of Renier, duke of the Lotharingians. Their daughter Ida marries Eustace, count of Boulogne, and becomes the mother of Godfrey and Baldwin of Jerusalem and Eustace of Boulogne the father of Maud the queen of Stephen, king of England. For further information we are referred to the *Ytinerarium* of Fulcher of Chartres.

It is thus clear that the story of the Swan Knight (pl. XXXVIII, *c*) was known in England and linked with the house of Boulogne from the twelfth century or even the eleventh.

One is tempted to surmise some connexion with the ownership of swans by the kings of England, linked by a late and shadowy legend with an importation of the Mute Swan from Cyprus by Richard I. Mr. Ticehurst, the authority on this subject, has, however, pointed out[6] an allusion by Giraldus Cambrensis[7] to the swan which

[1] Information from Dr. Paul Warming of Copenhagen.

[2] Information from Count H. C. Zeininger.

[3] *The Red Book of the Exchequer*, ed. Hubert Hall (Rolls Series), 1896, pt. ii, pp. 753–4.

[4] Its genealogy of the house of Blois ends with the marriage of Louis VII of France to Blanche of Castile, which took place in 1200.

[5] *Op. cit.* p. cclvi.

[6] *British Birds*, xvii, 1923–4, 174–82. 'The Early History of the Mute Swan in England', by N. F. Ticehurst.

[7] *Giraldus Cambrensis*, Rolls Series, vol. vii. Life of St. Remigius, c. xxix, Life of St. Hugh, c. x.

attached itself to St. Hugh, when he was enthroned as bishop of Lincoln in 1186, as a royal bird, and it further seems from his evidence that the right to keep swans was treated in the same way as any other profitable privileges of the crown. The next question is whether Tony or Bohun claimed descent from the house of Boulogne. In the genealogy of this as of other periods to claim a descent and to possess it were not always the same thing, the Tonys, however, had two descents from what may be called the Swan families (pl. XL). The fourth Ralph de Tony married in 1103 Alice, daughter of Earl Waltheof by the daughter of Lambert, count of Lens, a younger brother of Count Eustace II of Boulogne. And their son Roger de Tony married Ida, daughter of Count Baldwin III of Hainault. Though on this side there was no descent from the counts of Boulogne there was a common descent with them from the old dukes of Lower Lotharingia, and a descent from the counts of Brabant and Guelders, who, as we have seen, shared the claim to descent from the Swan Knight.

The Swan Knight link of the Bohuns is less obvious but still more interesting and oddly parallel, for they too have a direct descent from the house of Boulogne which is probably less important than a more roundabout connexion. Both these descents came through the marriage of Humphrey de Bohun, earl of Hereford and Essex, in 1275 to Maud, daughter of Enguerrand, lord of Fiennes in the Boulonnais, whose father's mother was the daughter of Faramus of Boulogne, the grandson of an illegitimate half-brother of Godfrey of Bouillon and Count Eustace.[1] It was through his mother that Enguerrand de Fiennes had a descent perhaps of more importance to our inquiry. She was Agnes, daughter of Aubrey II, count of Dammartin, and her brother was that same Count Reynaud of Dammartin who, as we have seen already, acquired the county of Boulogne by marriage with King Stephen's granddaughter Ida, only to lose it by the confiscation of Philip of France in 1212.[2] We have seen too that the heirs of another of Reynaud's sisters used the 'cri' 'Boulogne' and the title of count of Boulogne, just as if they had been descended from the Boulogne heiress instead of merely from her husband's sister. It is thus not unlikely that the lords of Fiennes, who could back up their legitimate but roundabout connexion through Dammartin with an illegitimate but direct descent through Faramus, may have numbered themselves among the heirs of the Swan Knight.

This opens up a still more interesting possibility, for Maud de Fiennes, countess of Hereford and Essex, was the second cousin of Edward I's queen, Eleanor of Castile, whose mother was the daughter of Simon de Dammartin, count of Aumale, the brother of Count Reynaud. We may now recall the famous occasion known as the 'Feast of the Swans', already mentioned in the passage quoted from Sir Harris Nicolas.[3] This was a feast held by Edward I at Westminster on Whit Sunday, the 22nd of May 1306, after knighting his son Edward and nearly 300 more. Two swans were brought in and the king swore 'before God and the swans' to avenge the death of Comyn and never thereafter to draw his sword on a Christian.[4]

Mr. Nöel Denholm-Young, in his important paper on 'The tournament in the

[1] J. H. Round in the *Genealogist*, N.S., vol. xxii, pp. 145–51, and *Peerage Studies*, pp. 160–1.

[2] p. 134.

[3] p. 128.

[4] *Flores Historiarum* (Rolls Series, 95), iii, 131–2.

thirteenth century',[1] connects this with Edward's cult of King Arthur. 'By that time', he points out, 'the legend of the Swan Knight in at least one form had become interwoven with the quest of the Grail in the Parsival legend. The story never seems to have achieved wide popularity in England, and we do not know the exact form in which it came to Edward.' Professor Roger Sherman Loomis, in his recent paper 'Edward I, Arthurian enthusiast',[2] adopts this view, pointing out that vowings at feasts are Arthurian and that other famous oaths upon birds are later than this oath of Edward's from which they were probably copied. Sir Maurice Powicke, however, is more cautious, remarking that, 'We need to know more about the symbolism of the swans.'[3] It does not, in fact, seem particularly likely that the Swan Knight legend, which had been known in England for a century and more in the form which linked it with Godfrey of Bouillon and the Crusade cycle, should have been adopted by Edward in the abnormal, Arthurian, form given it by Wolfram von Eschenbach, especially when the links of his own house with that of Boulogne[4] had been reinforced by those of his beloved Queen Eleanor.

The link between Edward's Swan Knight cult, which we may now postulate, and his Arthurianism, was rather, I suggest, that both belonged to an addiction to chivalric romance which could slip easily from one form or cycle into another. Mr. Denholm-Young himself suggests that 'he might have founded an Order of the Swans as his grandson nearly founded an Arthurian order, but when it came in 1348 it was established as the Order of the Garter'.[5] It may even be that the swans of Bohun and Tony are vestiges of a plan for such an order.

The development from Edward III's project of 1344 for a revived Round Table[6] to his actual Order of the Garter by 1347 or 1348 is notoriously obscure and light has been sought in Wardrobe Accounts recording payments for the making of articles decorated with badges and devices for the king's jousts and festivities. Among these Ashmole, Beltz, and Nicolas have all noted a payment for the making of a harness for the king for his Christmas festivities at Otford in 1348, consisting of a tunic and a shield wrought with the king's motto 'Hay, Hay, the Wythe Swan, by Godes soule I am thy man'.[7] Ashmole calls it 'that daring and inviting Motto of this *King*' but neither he nor, to my knowledge, anyone else has offered an interpretation. Yet the same account roll shows that among the gear provided for the king's Christmas festivities of the previous year at Guildford were twelve swans' heads with their wings (probably of buckram). Is it altogether out of the question that Edward, at this time of the incubation of his famous order, may have toyed, as it seems his grandfather did,

[1] *Studies in Medieval History presented to Frederick Maurice Powicke*, Oxford, 1948, p. 266.

[2] *Speculum*, vol. xxviii, Jan. 1953, pp. 114–27.

[3] *The Thirteenth Century, 1216–1307*, Oxford, 1953, p. 515, n. 2.

[4] Geoffrey Plantagenet (whose own mother was the daughter of *Helias*, count of Maine) was the stepson of Queen Melisande daughter of King Baldwin II of Jerusalem, the cousin and successor of Baldwin the brother of Godfrey of Bouillon, being grandson of Ida, countess of Rethel, a sister of Eustace II of Boulogne. Rous in the Warwick Roll converts this into a direct descent.

[5] *Op. cit.* p. 266, n. 3.

[6] Froissart, *Chroniques*, ed. S. Luce, tome iii, pp. 37–38; *Scalacronica*, ed. Maxwell, 1907, p. 113; *Adam of Muremuth*, ed. Maunde Thompson, 1899, pp. 155–6.

[7] Elias Ashmole, *The Institution of the Order of the Garter*, 1672, p. 185; G. T. Beltz, *Memorials of the Order of the Garter*, 1841, p. 380; Sir Harris Nicolas, *History of the Orders of Knighthood of the British Empire*, 1842, vol. ii, App. p. 7; quoting Roll of the Great Wardrobe from Michaelmas, 22 Ed. III to 31 Jan. 23 Ed. III; P.R.O. King's Remembrancer Office of the Exchequer E/101/391/15.

with the Swan Knight legend, alluding therein to his own descent? Here it will be well to cease, before we pass into regions of unscholarly conjecture.[1]

Three points in the pattern emerging from our argument are of special interest to students of heraldry. First the derivation of heraldic devices from preheraldic origins. There are other instances where this can be seen or at least conjectured, such as the imperial eagle and the British dragon, but they are few and most if not all these devices differ from the swan in being national or sovereign rather than family emblems.

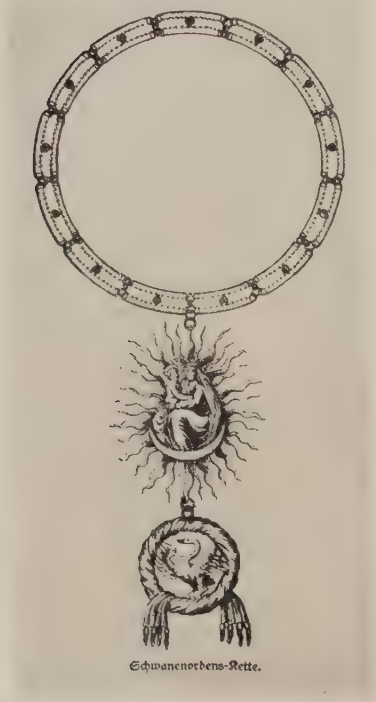
Secondly the close connexion between heraldry and romance. One would expect to find heraldry deeply coloured by an element so powerful in the soil out of which it grew, but little has been done in England—though somewhat more, as one would expect, in France—to ascertain this by example. It ought to be possible in other instances besides this.

Thirdly, some light is thrown on the history of heraldic badges, the principles of their adoption and inheritance and their relation to crests and supporters. In all these matters we have as yet too little material for generalization, but we have, I think, useful indications of where further light may be looked for.

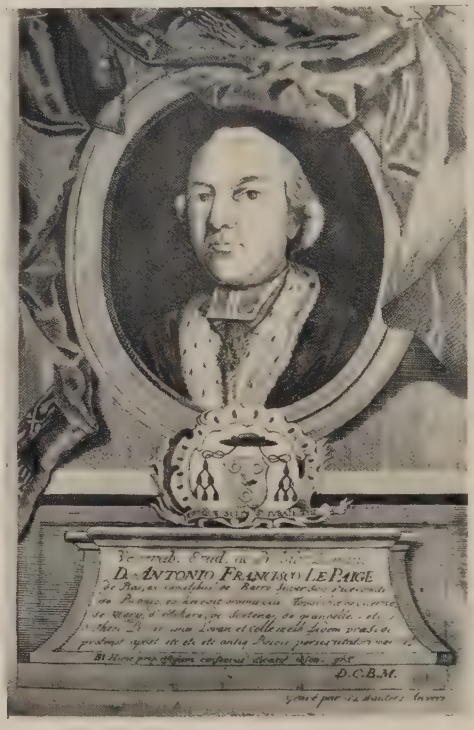
[1] Since this was written our Fellow Mr. John Harvey has drawn my attention to Miss C. K. Jenkins's article in *Apollo* of March 1949, 'Collars of SS: A Quest', which suggests that S. is for Signus = Cygnus. I cannot here discuss this but other parts of Miss Jenkins's argument link with my own.

a. Seal of Henry, prince of Wales (afterwards Henry V) for the duchy of Cornwall, with the swan badge above the shield. *b*. Seal of Henry, prince of Wales (afterwards Henry V) with swan supporters, 1404, St. John's College, Cambridge. *c*. Seal of the College of the Trinity, Pleshy, Essex, founded by Thomas of Woodstock, showing the swan badge below his arms. *e*. and *d*. Seal and counterseal of Thomas of Woodstock, duke of Gloucester (d. 1397). *f*. Seal of Edward Courtenay, earl of Devon (d. 1419). *g*. Seal of John, count of Angoulême (d. 1467). *h*. Seal of John, duke of Berry (d. 1416). *i*. Seal of Sir Ivo FitzWarin (d. 1419) who was in the retinue of Thomas of Woodstock at Nantes in 1380. *j*. Seal of Hugh Courtenay, earl of Devon (d. 1422)

a, *b*, *c*, *f*. Seals of John, duke of Berry (d. 1416). *d*. Seal of John II, count of Auvergne and Boulogne (d. 1394), Paris, Arch. Nat. Cl. 473. *e*. Seal of John I, count of Auvergne and Boulogne (d. 1386), Paris, Arch. Nat. D 564. *g*. Seal of John, count of Angoulême (d. 1467)



h. Collar of the Order of the Swan of Brandenburg from an effigy in the Schwanenordenskapelle Ansbach



i. Antoine Françoise le Paige, Knight of the Swan, 1780

a

b

c

d

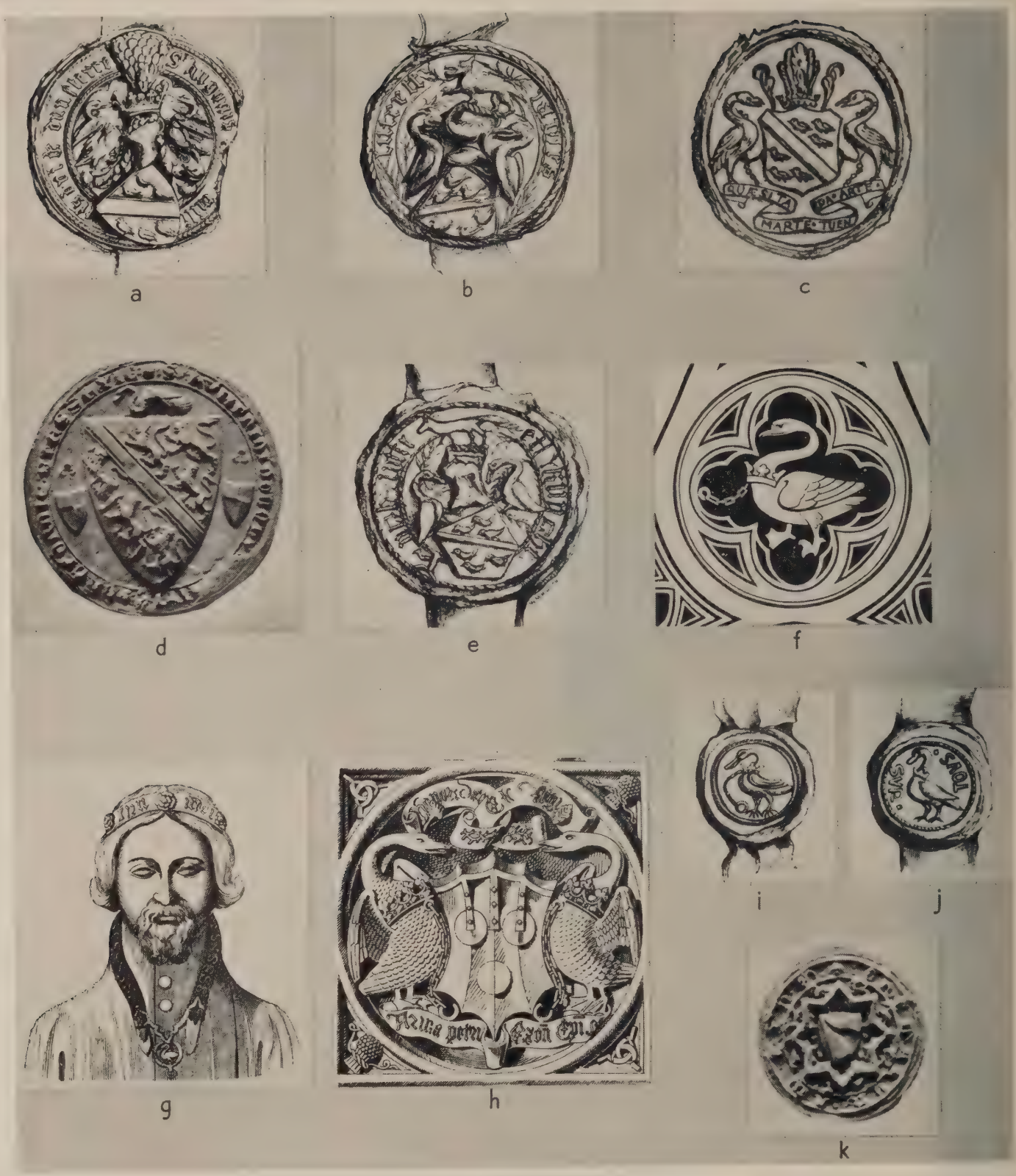
e

f

g

h

a. Garter Plate of Humphrey Stafford, duke of Buckingham (d. 1460). *b*. Garter Plate of Richard Beauchamp, earl of Warwick (d. 1439). *c*. Garter Plate of Hugh Stafford, Lord Bourchier (d. 1420). *d*. Garter Plate of Thomas Beauchamp, earl of Warwick (d. 1400). *e*. Garter Plate of John, Lord Beauchamp of Powicke (d. 1475). *f*. Carved slab brought to Corby Castle, *c*. 1839, supposed to be from the tomb of Thomas Mowbray, duke of Norfolk, in Venice, where he died in exile in 1399, showing the banner of Henry IV supported by a Bohun swan wearing a helmet with the royal crest and with a collar of SS (*Archaeologia*, xxix. 387). *g*. Swan badge of Bohun in an initial of Lambeth MS. 330, an early fifteenth-century commentary on Valerius ad Rufinum de non ducenda uxore. *h*. Arms of Cleves with Swan supporters and insignia of the Order of the Swan from Le Paige's *Histoire de l'Ordre hereditaire du Cigne*, 1780



a. Seal of Sir Hugh Luttrell (d. 1428). *b*. Seal of Sir James Luttrell (d. 1461). *c*. Seal of Alexander Luttrell (d. 1737). *d*. Counterseal of Humphrey de Bohun, earl of Hereford and Essex, showing his swan badge above the shield. From the Barons' Letter to the Pope, 1301. *e*. Seal of Sir Hugh Luttrell (d. 1521). *f*. Swan badge from the brass at Westminster of Eleanor, duchess of Gloucester (d. 1399), daughter of Humphrey de Bohun, earl of Hereford and Essex. *g*. Part of the effigy of John Gower in Southwark Cathedral showing the collar of SS given him in 1393–4 by Henry, earl of Derby, afterwards Henry IV, with the Swan of Bohun (*Gentleman's Magazine*, 1842, p. 353). *h*. Arms of Peter Courtenay, bishop of Exeter, 1478–87 from the mantelpiece which he set up in the Bishop's Palace, Exeter. *i*. Seal of Sir John Luttrell (d. 1551). *j*. Seal of Sir Andrew Luttrell (d. 1538). *k*. Seal of Robert de Tony with the legend CHEVALER AU CING, from the Barons' Letter to the Pope, 1301

a. Beatrice of Cleves receiving Helias the Swan Knight, from a Chronicle of the dukes of Cleves in the Munich State Library (Cod. Gall. 19, Catalogue No. 124). Otto Pächt, *The Master of Mary of Burgundy*, 1947, p. 66 and pl. 26 (*a*). I owe this reference to our fellow, Mrs. Pamela Tudor-Craig

b. Eneas the Swan Knight with the cup, from the English version of the Rous Roll in the British Museum, *c*. 1484

By permission of the Trustees of the British Museum

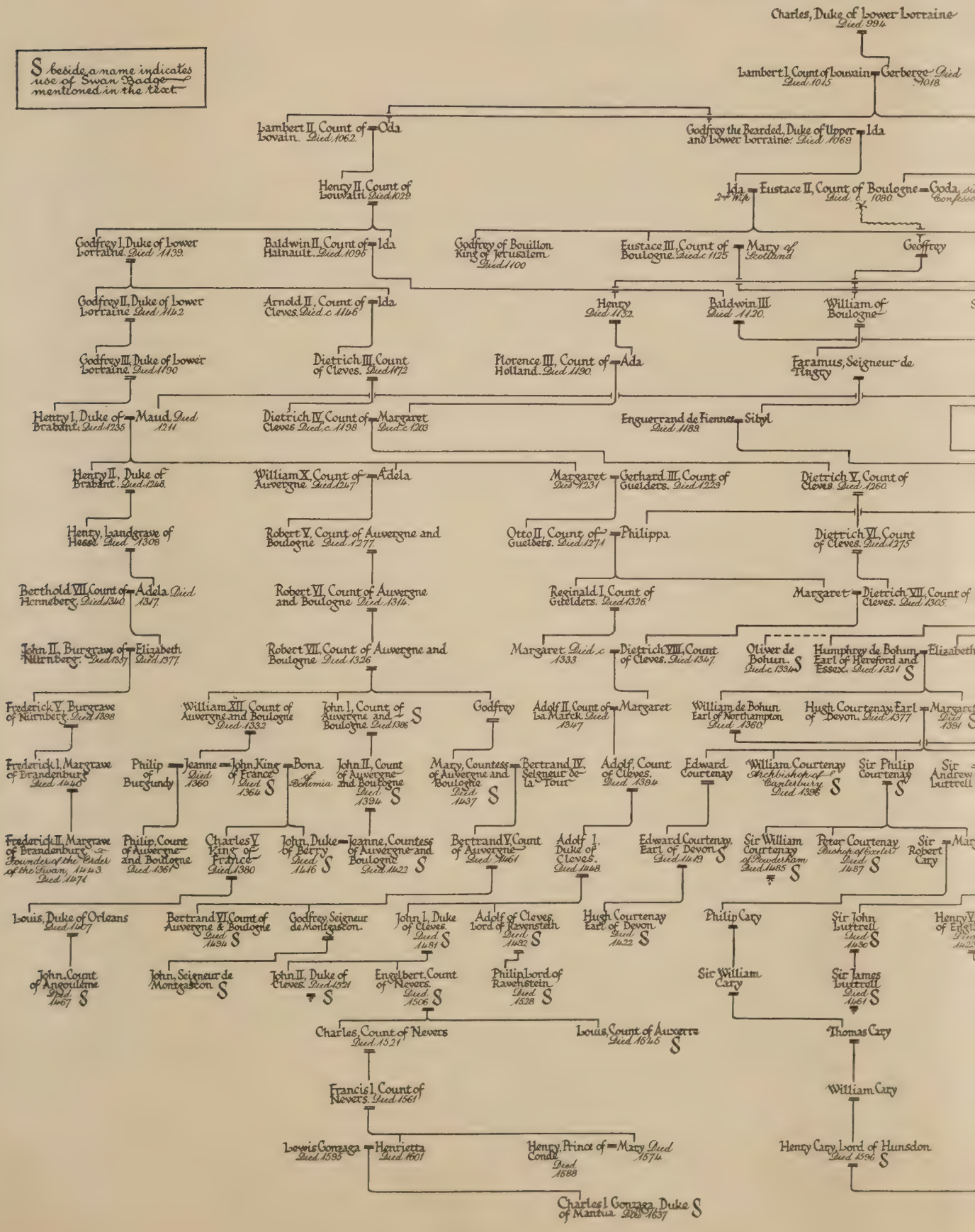
c. Misericord in Exeter Cathedral, *c*. 1250, showing the Swan Knight

a. Tomb of Margaret, wife of Sir Edward Hoby, at Bisham, Berkshire, 1595

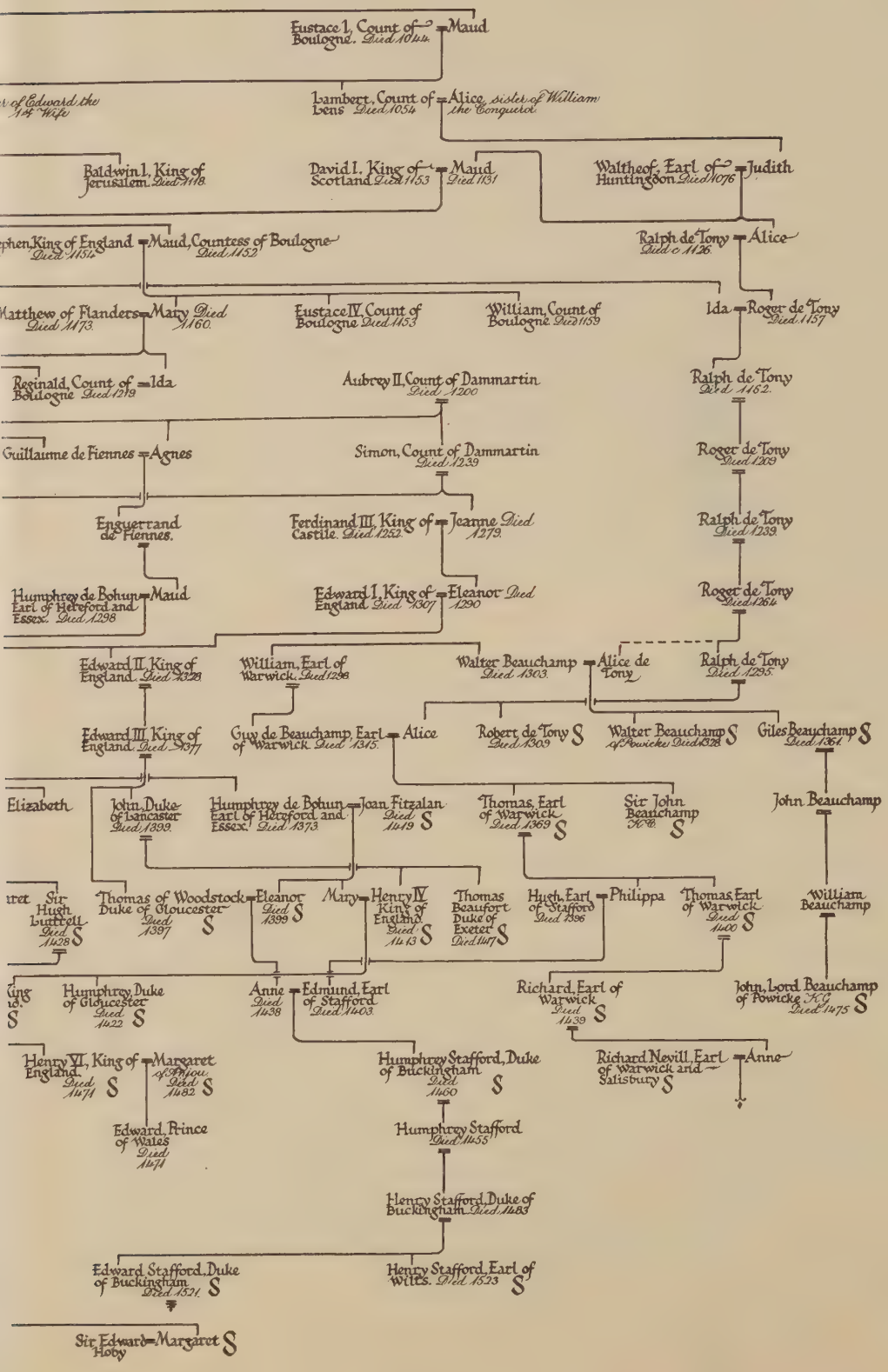
b. Mourning swans at the feet of the effigy in Exeter Cathedral of Margaret (d. 1391), daughter of Humphrey de Bohun, earl of Hereford and Essex, and wife of Hugh Courtenay, earl of Devon

Summary Pedigree to show the links between th

S beside a name indicates use of Swan Badge mentioned in the text.



Families using Swan Badges.



The Greyhound as a Royal Beast

By H. STANFORD LONDON, Esq., F.S.A., Norfolk Herald Extraordinary

[*Read 3rd February 1955*]

THE greyhound, from its use as a royal beast by Henry VII and the other sovereigns of the House of Tudor, is familiar to every student of armory and to many who care nothing for the noble science. It was, moreover, brought prominently to our notice at the time of the queen's coronation by its inclusion among the ten Queen's Beasts which were then set up outside Westminster Abbey, and which were afterwards placed in the Great Hall at Hampton Court Palace.

Greyhounds are common in heraldry all over western Europe, and in the British Isles alone there must be over a hundred families who use or have used a greyhound either on their shields or as crest, badge, or supporter. In some cases like Mauleverer and Whelpdale the hound is canting, but in most cases there is no such simple and obvious explanation, and we can only suppose that the greyhound's popularity in armory springs from its early use as a hunting dog by persons of all ranks. Here, however, we are concerned solely with the greyhound as one of the English royal beasts.[1]

It is well known that greyhounds were included in the royal packs at least as early as the twelfth century,[2] and when we recall that Edward III is said to have taken a falcon as one of his badges 'for the love which he bare to the princely sport of hawking',[3] we can hardly be surprised to find that the greyhound also figured as a royal badge from an early period. In this paper it is proposed first to consider the creature as a Tudor beast, and thereafter to seek out some of its earlier owners in the royal house and allied families. But first I would thank Garter and his fellows, kings, heralds, and pursuivants of arms, for generously permitting me to consult and to quote from manuscripts in their record-room and library. Without that permission this study could not have been carried out. I also thank my friend Mr. Anthony Wagner, C.V.O., F.S.A., Richmond Herald and Secretary of the Order of the Garter, for many helpful suggestions.

As a supporter of the royal arms the greyhound was used almost always by Henry VII, frequently by Henry VIII, less often by Edward VI, Mary, and Elizabeth. Henry VII occasionally used two greyhounds as on the seal of the Court of Common Pleas[4] and on the Courtenay chimney-piece in the Bishop's Palace at

[1] On this use of the term 'beast' see the present writer in *The Queen's Beasts* (Newman Neame Ltd., 1954), p. 15, and *Royal Beasts* (Heraldry Society, 1956, p. 3).

[2] G. H. White, F.S.A., 'The *Constitutio Domus Regis* and the King's Sport', *Antiq. Journ.* xxx, 1950, p. 52, etc., and works there cited.

[3] Bodleian MS. Ashm. 1121, fo. 233.

[4] Cast in the collection of the Society of Antiquaries; *Archaeologia*, lxxxv, 1936, pl. 86 (3); C. H. Hunter Blair, *Durham Seals*, no. 3051. It is remarkable that the arms on this seal are Old France and England quarterly, although the semy of Old France had been replaced in general use by the three lis of New France for nearly a century. It seems indeed that the same reverse was used

Exeter.[1] A dragon and a greyhound were, however, more usual (pl. XLI, *a*). They occur repeatedly in King's College Chapel, Cambridge,[2] in Westminster Abbey, and in countless other places.

Under Henry VIII the greyhound is usually found with a dragon on the dexter side, as in Rushbrooke church, Suffolk, in Crudwell church, Wilts.,[3] and on two gold cups entered in an inventory of the royal regalia and plate.[4] Sometimes the lion of England is on the dexter as on one of his seals for the Court of Common Pleas[5] and on the 'Royal Grace Cup' which he gave to the Company of Barber Surgeons and which is still in their possession.[6] On an earlier seal for the Court of Common Pleas the arms are supported by two greyhounds as in his father's case. Two greyhounds also appear on his seal for the County Palatine of Lancaster, but these have turned their backs on the shield and each holds up a large ostrich feather (pl. XLI, *b*). This arrangement was continued on the Lancaster seals under Edward VI, Elizabeth I,

in the Common Pleas by Edward III and all succeeding sovereigns to Edward IV, the spandrels between shield and legend being blank. Richard III added two boars in those spaces, and Henry VII changed the boars to greyhounds, but otherwise the design was unchanged. This point was touched on by Sir Hilary Jenkinson in his paper on 'The Great Seal of England: Deputed or Departmental Seals' (*Archaeologia*, lxxxv, 302–3), but it has been clarified by the recent researches of Mr. R. H. Ellis, F.S.A., whose help on this and other points I acknowledge with gratitude.

[1] *Vetusta Monumenta*, iii, pl. 38; Willement, *Regal Heraldry*, p. 59; *Arch. Journ.* lxxxiv, 382.

[2] See, e.g. Hope, *Heraldry for Craftsmen and Designers*, p. 213.

[3] H. Munro Cautley, *Royal Arms and Commandments in our Churches*, 1934, p. 21; *Country Life*, 22nd October and 26th November 1953. Cf. Willement, *Regal Heraldry*, pl. xv from British Museum MS. Royal 8 G. 7, F. Sandford, *A Genealogical History of the Kings and Queens of England*, 1707, p. 479; Hope, *Heraldry for Craftsmen*, pp. 332–3; G. W. Eve, *Decorative Heraldry*, p. 217.

[4] F. Palgrave, *The Antient Kalendars and Inventories of . . . H.M. Exchequer*, 1836, ii, p. 281, nos. 25, 26. Sandford says that Henry VIII used the dragon and greyhound as supporters in the beginning of his reign, but afterwards discontinued the greyhound and replaced it with a lion of England (p. 479), and a similar statement is to be found in later writers. It is, however, doubtful whether the dragon–greyhound combination was ever completely superseded by the lion and dragon. If it was so superseded this can only have been in the last ten or twelve years of the reign, for the dragon and greyhound are the usual, if not the only supporters in the new work ordered by Henry VIII at Hampton Court Palace in the 1530's, and that in spite of the fact that as a single beast the lion was set there hardly less often than the dragon and greyhound. In the chapel of King's College, Cambridge, which was finished by 1515, only the dragon and greyhound support the royal arms in the older work. But on the choir screen and other woodwork erected in the time of Anne Boleyn, 1533–6, three different pairs of supporters are to be seen, a dragon and a greyhound, a lion and a dragon, and two lions. On the other hand, if my reading of the beasts on the flying buttresses at the west end of the nave is correct, the lion and dragon do appear together there. The four westernmost buttresses on each side each carry two beasts, one towards the top, the other lower down. These originally held vanes, but both vanes and staves have disappeared. These beasts face each other in pairs, the pairs being placed alternately, a lion and an antelope for Henry VI, and a dragon and a greyhound for Henry VII. The rest of the buttresses carry no beasts with the single exception of the fifth from the west on the north side. That also bears two beasts, a dragon above and a lion below, but whereas on the other buttresses both beasts face the same way, in this case the dragon faces east and the lion west. They must therefore be read as a pair, and as the beasts cannot have been executed, still less chosen, after about 1510, it follows that the dragon–greyhound and lion–dragon combinations must both have been used from the very beginning of Henry VIII's reign. That conclusion is moreover corroborated by the contemporary painting of the English camp at the Field of Cloth of Gold, an engraving of which was published by the Society of Antiquaries in 1774. In this the royal lodging appears in the middle foreground as an elaborate wooden erection displaying the royal arms over the entrance and royal beasts at the four corners of the central turret. Over the archway the shield is supported by the lion and dragon, but on the turret the beasts are two dragons and two greyhounds. Four more beasts, probably meant for lions, squat at the corners of the main roof. All eight beasts hold vanes or small banners charged with badges, the cross of St. George, the rose, portcullis, and fleur-de-lis (cf. *Archaeologia*, iii, 202, etc.). The royal arms in Rushbrooke church afford an even later example of the dragon and greyhound than any of the above, for they seem to date from about 1540; on the other hand they lack the official sanction of arms displayed in a royal palace.

[5] *Archaeologia*, lxxxix, 1943, pl. viii(*e*); *Durham Seals*, no. 3056.

[6] *The Antiques Review*, June 1953, p. 30.

and James II, but on the corresponding seals in the reigns of Edward VII and George VI the greyhounds were changed into talbots.[1]

Edward VI, Mary, and Elizabeth generally used the lion and dragon,[2] but Edward and Mary both set a lion and a greyhound as supporters on the seal of the Court of Common Pleas, following therein the example of Henry VIII's later seal for that Court. Elizabeth's seal for the English Court of Common Pleas has a dragon and a greyhound as supporters, but on that of the Irish Court the greyhound is on the dexter and the dragon on the sinister.[3] And here it may be remarked that, although since the accession of James I in 1603 the only officially recorded supporters of the royal arms have been the lion and unicorn, yet other supporters continued to be used much longer for certain departmental seals. So, for example, the judicial seals of the four groups into which the Welch counties were divided had each its special supporters, these being a greyhound and a stag for the Caernarvon-Merioneth-Anglesey group (pl. XLI, *c*), and for Brecknock, Radnor, and Glamorgan a greyhound and a hind (pl. XLI, *d*).[4] The matrix of George III's seal for the former group is now in the British Museum and displays the stag and greyhound as supporters in that order.[5] The greyhound also continued to appear as a supporter on the seal of the Court of Common Pleas at least to the reign of George III, whose seal for that Court shows a dragon and a greyhound[6] as on Elizabeth I's seal and on those of James I and Charles I for the same Court.

Returning to the Tudors, there are grounds for thinking that the greyhound was regarded as the royal family's peculiar and especial beast. For instance, a carving of the impaled arms of Henry VIII and Anne Boleyn on the screen of King's College Chapel, Cambridge, supports the shield with a collared greyhound and the male griffin of Ormonde (pl. XLIII, *a*).[7] Again, Queen Mary as princess used as her dexter supporter a white greyhound with her coronet about its neck, the sinister being her mother's black eagle (pl. XLIII, *e*).[8] Yet again, in Prince Arthur's Book, an early

[1] Unless other references are given all seals mentioned in this paper are described from casts in the Society's collection.

[2] A Sussex iron fireback with the dragon and greyhound as supporters and the motto 'Dieu et mon Droit', also bears the initials 'E.R.', which may stand either for Edward VI or for Elizabeth I (Eve, *Heraldry as Art*, p. 187). This, however, may be no more than an instance of the founder using an old mould without troubling to correct anything except the initials; the motto suggests Edward VI rather than Elizabeth.

[3] *Archaeologia*, lxxxv, pl. 94 (5).

[4] *Ibid.* p. 328.

[5] *Catalogue of British Seal-Dies in the British Museum*, by A. B. Tonnochy, F.S.A., 1952, no. 53.

[6] *Ibid.* no. 19.

[7] Sandford, p. 487, calls the sinister supporter a lion with a griffin's head. But albeit the forelegs are a lion's and there is no vestige of ears nor of the rays or spikes which distinguish the male griffin, that creature was certainly meant, for Anne's father was created Earl of Ormonde in 1527, and Anne's arms are supported elsewhere by a leopard and a male griffin (College of Arms MSS. I. 2, fo. 13 and D. 4, fo. 1; *Banners, Standards and Badges*, De Walden Library, 1904, p. 17). It would seem that the carver, who was almost certainly a foreigner and unlikely to be familiar with the Ormonde beast, was told to produce a wingless griffin, and that he found the griffin described in some bestiary as having all its bodily members like a lion's but wings and mask like an eagle's (see for example the Cambridge University Bestiary translated by T. H. White in *The Book of Beasts*, 1954, pp. 23–24). He therefore produced a lion with an eagle's head, omitting the wings but adding a beard of Aaronic luxuriance. Willement's blazon of the supporters as a leopard and a greyhound (*Regal Heraldry*, p. 69, n.) is sadly at fault.

[8] The achievement is painted in two manuscripts in the College of Arms, Prince Arthur's Book, p. 72, and I. 2, fo. 1. It is a lozenge, Quarterly, 1 and 4. France; 2. England; 3. Spain as borne by Catherine of Aragon. The lozenge is crowned with an open coronet of fleurs-de-lis and formy crosses, and supported by the greyhound and eagle. The paintings are reproduced respectively by Willement in *Regal Heraldry*, pl. xix, and by Foster in *Banners etc.*, p. 21, and it is remarkable that both editors described the achievement as that of *Queen* Mary. Willement even animadverted on the impropriety of Mary

sixteenth-century manuscript in the Heralds' College, the arms of Margaret, eldest daughter of Henry VII and queen of James IV of Scotland, are supported by the Scottish unicorn and a white greyhound (pl. XLII, *a*), and her sister Mary as queen of France has her arms supported by King Louis' golden porcupine and a white greyhound (pl. XLII, *b*).[1]

Nor is the royal greyhound only found as a supporter of the arms. It was freely used as a badge on flags and in many other ways.[2] Two of Henry VII's standards displayed a greyhound as the beast or principal device.[3] Two of Henry VIII's standards did so too (pl. XLI, *e*),[4] and the 'Standerd of the Greihond' was carried at the funerals of Edward VI, Mary, and Elizabeth.[5] A gold salt-cellar adorned with a lion, a dragon, and a greyhound figures in the inventory of Henry VIII's regalia and plate,[6] and that monarch on the reverse of his second Great Seal introduced a greyhound running beside his charger. The hound kept this place on the Great Seals of later kings down to Charles II, but it does not appear on the seals of Queens Mary I and Elizabeth.[7] Other seals which show the hound running beside the sovereign's charger are those of the Augmentation Office under Henry VIII and Edward VI and the Irish Chancery under Edward VI and Philip and Mary.[8] In more recent times the fact that the greyhound was a royal beast has been forgotten and it has sometimes been turned into a talbot,[9] or even, as on the present seal for the County Palatine of Lancaster, metamorphosed into the queen's pet corgi.

In connexion with this use of the greyhound we may also notice the two white greyhounds with red collars in the very forefront of the Windsor Castle painting of

quartering her 'husband's' arms in that way. Apart from the fact that both manuscripts were painted thirty years or so before Mary's accession and marriage, the use of the lozenge and the unarched coronet show clearly that the achievement is that of a maiden princess and that the Spanish quartering must be for Mary's mother, Catherine of Aragon.

[1] p. 132. For reasons which will be explained below this manuscript must be regarded as authoritative. Princess Mary was married to Louis XII in October 1514, but he died not three months later, on 1st January 1515, and in 1517 she married Charles Brandon, duke of Suffolk. Her achievement has a further interest as the shield is enclosed by a collar of Tudor roses (party gules and argent) *en soleil* laced with blue ribands to the golden scallop shells of the French Order of St. Michel. Some other examples of such combined collars are noticed by J. G. Nichols in a paper 'On Collars of the Royal Livery' printed in *The Gentleman's Magazine*, February–December 1842 (reprint pp. 14, 15).

[2] See, e.g. Perrin, *British Flags*, 1922, p. 45.

[3] *Banners etc.*, pp. 79, 99, from Coll. Arm. MS. I. 2, ff. 26, 36. Prince Arthur's Book, p. 54, paints a banner party paleways; the dexter half is white charged with a red dragon and a chief of St. George surcharged with a red rose regally crowned; the sinister half is green powdered with gold fleurs-de-lis and charged with a white greyhound with red collar having in dexter chief the Windsor sun-burst and in sinister chief the Beaufort portcullis ensigned with an open coronet. This is reproduced in colour in the *Illustrated Catalogue of the Society of Antiquaries' Heraldic Exhibition*, 1894, pl. XXXII.

[4] See 'Wriothesley's Funeral Banners', Brit. Mus. MS. Add. 45132, p. 42. This is a note about eight standards made by 'Anthony Tote Sargeaunt Paynter' in 1545, two each of the lion, dragon, greyhound, and white hart. The standards were 15 ft. long tapering from 4 ft. to 8 in. The colours of the field and fringe varied, the greyhound being on a banner of blue and yellow with red and blue fringe. See also *Collectanea Topographica et Genealogica*, iii, 1836, p. 59, from MS. Harl. 4632, a collection of banners, etc., made about 1530 by Christopher Barker, then Richmond Herald and afterwards, 1536–50, Garter.

[5] *The Diary of Henry Machyn*, Camden Soc. no. 42, 1848, pp. 39–40, 182; Sandford, p. 498; Leland, *Collectanea*, ed. Hearne, 1774, v, 307, 323; *Vetusta Monumenta*, iii, pl. 19, from a manuscript in the British Museum.

[6] Palgrave, *op. cit.* ii, p. 288, no. 7.

[7] A. and A. B. Wyon, *The Great Seals of England*, p. 68, pl. xviii, no. 99, and *passim* to p. 105, pl. xxxvii, no. 141; Sandford, pp. 457–8, 546–8*a*. On Charles II's first Great Seal the hound was replaced by a lion (*Bodleian Quarterly Record*, no. 7, supplement, 1915, p. 199); it reappeared on his second Great Seal, but disappeared for good on the third Seal. On the Great Seal for Ireland, however, the greyhound still appears in 19 Ch. II, although the third seal, with no greyhound, was already being used in England.

[8] *Archaeologia*, lxxxv, pl. 87, 91, 92.

[9] *Ibid.* pl. 98.

the English encampment at the Field of Cloth of Gold. They are shown running beside the marquis of Dorset, who carries the Sword of State in King Henry's royal cavalcade. Sir Joseph Ayloffe in describing the picture seemed to be in some doubt as to their significance, and even suggested that they might allude to some office held by the marquis.[1] But there is no need to seek any such esoteric meaning. The king himself is only separated from the marquis by a file of Yeomen and we must surely read these two dogs as living exemplars of the royal badge. The king could hardly keep a pet dragon, or even a pet lion, about the Court, but what more natural than that he should have a couple of white greyhounds? And it is not the first time that a dog has run on ahead of its master!

In St. George's Chapel, Windsor Castle, the greyhound is carved again and again. It is one of the royal beasts which disport themselves on the canopy of the Queen's Closet and on the cornice of the Beaufort chantry,[2] but it occurs most frequently on the roof-bosses. There it is sometimes alone; sometimes it companies with the dragon; now it holds a dragon or a portcullis; now it supports the royal arms, and now it appears alone as a badge in its own right.[3]

In the Royal Navy one of the *galliasses*[4] mentioned in the Navy Lists of 1546 and 1551 was named the *Greyhound*.[5] The vessel was built in 1545 and was wrecked off Rye in 1563.[6] From that time until the present century the name has been borne by sixteen royal ships, the last being a destroyer launched in 1935 and sunk by German aircraft in the Battle of Crete on 22nd May 1941.[7] One wonders how many of the officers and men who served in those ships realized that the greyhound for which their ship was named is a royal beast whose history goes back at least to the time of Edward III. The royal greyhound has not yet been granted to any unit of the Royal Air Force, but in the Army it is one of the company badges in the Grenadier Guards, and the silver greyhound has long been familiar as the badge of the Queen's Messengers, a use to which we shall have to revert presently.

Apart from all those uses, wherever the royal beasts congregated, there one was sure to find the greyhound. It was one of the vane-holders in the Palace of Whitehall.[8] It was one of the beasts erected on Rochester Bridge in 1536–7.[9] It was one of the six 'Beasts Royal' which adorned the cisterns and fountains erected in 1557 when water was first brought to Windsor Castle from outside.[10] It is one of the ten beasts carved along the lintel of the fireplace erected in 1583 in Queen Elizabeth's Gallery (now the Library) in Windsor Castle,[11] and it was one of the four beasts, the

[1] *Archaeologia*, iii, 209.

[2] See 'The Beaufort Chapel' by Canon E. M. Venables, in Friends of St. George's, Report to 31st December 1952, pp. 18, 21 and pl. v.

[3] 'The Roof-Bosses in St. George's Chapel, Windsor' by C. J. P. Cave and H. S. London in *Archaeologia*, xcv, 1953, pp. 107–22; T. Willement, *The Collegiate Chapel of St. George, Windsor*, 1844, pp. 25, etc.; W. H. St. J. Hope, *Windsor Castle*, pp. 454, etc.

[4] A war-ship somewhat larger than a galley, propelled partly by oars and partly by sail.

[5] J. A. Montagu, *A Guide to the Study of Heraldry*, 1940, p. 74; *Archaeologia*, vi, 1872, p. 218.

[6] *The Diary of Henry Machyn*, pp. 302, 394.

[7] I thank Mr. C. V. Hill, Deputy Librarian at the Admiralty, for this and much other information about H.M. ships bearing this name.

[8] Sandford, p. 479.

[9] 'Heraldic Decoration of the Drawbridge of the Medieval Bridge of Rochester' in *Archaeologia Cantiana*, lxiii, 1951, pp. 140–3.

[10] Hope, *Windsor Castle*, p. 257. The beasts were the eagle, lion, antelope, greyhound, griffin, and dragon.

[11] I have to thank Sir Owen Morshead, K.C.V.O., the Queen's Librarian, for drawing my attention to this. The fireplace is illustrated in his book *Windsor Castle*, pl. 53. The beasts are lion of England, dragon, grey-

lion, dragon, greyhound, and bull, each holding a scocheon with one of the queen's badges, which Elizabeth I had placed on the landing-stage at Greenwich Palace in 1588.[1] The hound was particularly prominent at Hampton Court in the works ordered by Henry VIII. It was set, for instance, on the bridge over the moat, on the fountain in the Inner Court, and on the battlements and gables of the New Hall. Of thirty-eight beasts which stood about the ponds in the new garden five were greyhounds,[2] and some of these may be seen in a contemporary picture still at Hampton Court.[3] Alas, most of those beasts have disappeared, and the greyhound which now squats on the bridge over the moat is a modern substitute carved and erected in 1950 to replace one made in 1910 in circumstances which were related by its designer, the late E. E. Dorling, F.S.A., in his book *Leopards of England*.[4] Greyhounds were also among the seventy-six King's Beasts which were reinstated on the clerestory parapet and flying buttresses of St. George's Chapel in 1925. This, however, is not the royal hound. The fact that it was set among the Yorkist beasts on the north side of the choir and that it holds a shield charged with the Nevile saltire shows that it is the Nevile beast standing for Henry VIII's mother Elizabeth of York.[5] Finally a greyhound was one of the ten beasts which guarded the Westminster Abbey Annexe at Her Majesty's coronation on 2nd June 1953. There the greyhound held a shield with a crowned Tudor rose on a field of white and green, the Tudor liveries.[6] At Hampton Court its shield bears the three lions of England.

Nor may it be forgotten that a greyhound was one of the beasts which perched atop the royal tents on Henry VIII's expedition to Tournai and Thérouanne in 1513. Edward Hall recounts that: 'The Kyng for hym selfe had a howse of tymber with a chimney of yron,[7] and for his other lodgynges he had great and goodly tentes of blewe water worke garnyshed wit yelowe and white, diverse romes within the same for all offices necessary, on ye topp of ye pavilions stode ye kynges bestes holdyng fanes, as ye Lion, ye Dragon, the Greyhounde, the Antelope, the Donne kow: within all the

hound, antelope, bull, hart, crowned falcon (for Queen Anne Boleyn), boar, panther, and swan. Mr. John Summerson, F.S.A. tells me that, in the course of research on the King's Works, he discovered that the chimney-piece was carved by John Pinckney (Public Record Office, Var. Acs. AO. 3/1243).

[1] Drake's revision of Hasted's *History of Kent*, p. 61, citing the works accounts. One Robert Dixon was paid 26*s.* each for the four beasts with an extra 4*s.* 6*d.* for the greyhound's tail which was of iron. In connexion with Queen Elizabeth's use of the greyhound one should perhaps recall a passage in Gerard Legh's *Accedence of Armorie*, published in 1562: 'The horses friende is the Grey-hound, and the Beare is his mortall enemie, which in both naturally by kinde is planted, as at their first encountring most cruelly fight together' (fo. 54*b*). Prima facie this is a straightforward statement of fact, but J. G. Nichols thought that the greyhound might allude to the queen, the horse to the earl of Arundel, and the bear to the earl of Leicester (*Herald and Genealogist*, i, 64). Readers must weigh for themselves the credibility of that suggestion. I will only say that a horse was certainly an Arundel badge, and that a bear or a bear and ragged staff was Lord Leicester's badge.

[2] 'On the Stone Bridge at Hampton Court' by the late Sir C. R. Peers in *Archaeologia*, lxii, 309, etc. The other beasts were 4 dragons, 6 lions, 5 harts, 4 yales, 6 panthers, 3 bulls, and 5 unicorns; they were of stone and cost 26*s.* each. The three beasts in the Inner (now the Clock) Court were of wood and cost only 5*s.* each.

[3] W. H. St. J. Hope, *Heraldry for Craftsmen and Designers*, pp. 246–7.

[4] Published 1913, see pp. 44–45, 48, 56. See also Peers, *loc. cit.*

[5] See 'The King's Beasts on St. George's Chapel' by the present writer in the Annual Report of the Friends of St. George's Chapel, Windsor Castle, for 1953. Whoever selected that series of beasts confused Henry VII's greyhound with the Nevile beast, but that is a point which is considered in more detail below.

[6] *The Queen's Beasts*, p. 41; *Royal Beasts*, p. 38.

[7] Probably the same (a Tudor 'pre-fab.'!) which was made for use at the Field of Cloth of Gold a few years earlier, see above, p. 140, n. 4.

lodgynge was payneted full of sonnes risynge, the lodgynge was .C.xxv. foot in length.'[1]

No illustration is known which explicitly represents those tents, but in a volume of miscellaneous limnings in the British Museum, Cotton MS. Augustus 3, there are paintings of three most elaborate pavilions which appear to date from the early part of the sixteenth century. One of these is of crimson and gold damask (pl. XLIV, *a*), a second is of blue and gold damask, and the third is paly of the Tudor white and green (pl. XLIV, *b* and *c*).[2] It is true that there are no beasts on the blue and the striped marquees, but the posts of the crimson marquee are topped with eighteen royal beasts, 8 greyhounds to wit, 4 lions, 3 dragons, 2 harts, and 1 antelope.[3] The greyhounds are white with gold-studded red collars. The lions are gold, and the dragons red, or rather gold purfled with red, while the harts and antelope are white with golden horns and hooves, the harts having gold collars and the antelope a gold crown and chain about its neck. Like those on the Thérouanne pavilions all these beasts hold vanes; ten are painted with the royal arms of France and England quarterly, and the others are blue with a golden fleur-de-lis, portcullis, or rose, badges which were also held by the beasts on the roof of the king's own lodging at the Field of Cloth of Gold. Only one of the eight greyhounds bears the arms. Of the others three hold a fleur-de-lis, three a portcullis, and one a rose. The remaining badge, a fleur-de-lis, is held by one of the harts.

The colour shows that this painting cannot represent the goodly tents described by Hall. But, although neither the blue nor the striped pavilion is furnished with beasts, their tent-poles end in gilt capitals and long spikes. The capitals closely resemble those on which the crimson tent's beasts sit, while the spikes recall the pricket of an old candlestick or the point fixed to some funeral helms to support the crest.[4] This suggests that the beasts were movable and were impaled on these points as and when required, and that being so it is highly probable that the blue and gold tent actually represents that used by King Henry in 1513. There is, however, nothing to show when the other two marquees were used. Strutt, who illustrated all three, suggested that they might have been designed for use at the Field of Cloth of Gold,[5] but the Windsor Castle painting of that encampment shows nothing in the least resembling these, nor does Hall describe any such pavilions in his account of the arrangements on that occasion. On the other hand striped tents somewhat like that mentioned above may be seen in Vertue's engraving of the Siege of Boulogne in 1544, but their tent-poles are decked with small flags or vanes; there are no beasts and no 'capitals' on which beasts could rest.[6]

[1] *Hall's Chronicle*, ed. 1809, p. 543; ed. 1550, fo. xxviij; *Grafton's Chronicle*, ed. 1809, p. 259.

[2] Items 18, 11, and 19. The artist is unidentified, and even his nationality is uncertain, but the style of the painting suggests a Flemish or Low German origin.

[3] The preponderance of greyhounds is particularly interesting, and it was that very preponderance which led me to devote so much time and space to these paintings. I take this opportunity to thank Mr. Martin Holmes and Mr. J. L. Nevinson for very interesting comments thereon. Mr. E. Croft Murray and Dr. C. E. Wright of the British Museum have also been most helpful in this connexion.

[4] This parallel seems the more interesting as the carved wooden crests used at funerals would naturally be supplied by the same craftsmen as the beasts for the tents.

[5] *Manners and Customs*, iii, pl. viij. I owe this reference to Mr. Holmes.

[6] Published by the Society and described in *Archaeologia*, iii, pp. 252, etc.

As a Tudor badge the greyhound has always been white, and wears a collar. This is generally red with gold edges and studs and with a gold terret or ring. Other colours are only occasionally found, as, for example, on Henry VII's portrait in St. George's Chapel where the collar is gold charged with a red rose.[1] Although collared the greyhound has neither leash nor chain.[2] Such additions are, however, to be seen in some earlier examples of the beast. In some cases at least they seem to have been added deliberately as difference marks. In some cases too the collar itself was differenced, as, for example, in the augmentations given by Charles I to Sir Edward Walker in recognition of his eminent services as Garter, as Secretary for War, and in other ways. These were granted by letters patent dated at Newport, I.O.W., on 1st November 1648, and comprised a quartering of augmentation and a crest, namely, as quartering: Argent, the red cross of St. George charged in the middle with a silver greyhound wearing a gold collar; and as crest: a like greyhound having a red collar charged with three little golden crowns.[3]

Considering how prolific the royal greyhound was it is surprising that so little attention has hitherto been given to the problem of its origin, modern armorists usually accepting one or other of the theories put forward by Sandford and Willement without, apparently, looking any further. In fact, the story of the greyhound well illustrates the danger of blindly accepting statements in the heraldry books and the folly of jumping to conclusions.

Francis Sandford, Rouge Dragon Pursuivant 1661–75 and Lancaster Herald 1675–89, whose *Genealogical History of the Kings and Queens of England* is a mine of valuable information about the royal arms and badges, opined that the greyhound was a Yorkist badge used by Henry VII in right of his wife Elizabeth of York, eldest daughter of Edward IV and granddaughter of Cecily Nevile.[4] That view was accepted by Montagu in 1840,[5] and it was apparently accepted also in 1925 when the King's Beasts were restored to the roof of St. George's Chapel, for, as already stated, the greyhound was then set among the Yorkist beasts and its shield was charged with the arms of Nevile, Gules, a saltire argent.

Willement, after reporting Sandford's explanation of the greyhound, recalled Henry VII's reluctance to notice 'the rival House of York', and then proceeded to derive his use of the beast from Beaufort, calling attention to the Beaufort, or St. Michael's, or Warriors' Chapel in Canterbury Cathedral, where the greyhound appears in the window and on the roof-bosses, and lies at the feet of the effigy of Sir John Beaufort, earl of Somerset, the eldest of John of Gaunt's sons by Catherine

[1] In imitation of this the greyhounds reinstated on the roof of St. George's Chapel in 1925 have collars charged with roses alternating with small studs. In *Regal Heraldry*, pl. xv, Willement shows the greyhound with a blue collar, but in the original painting which he purports to reproduce (Royal MS. 8 G. 7, fo. 1) the beast wears the usual red collar with gold studs, etc.

[2] The leash which hangs from the greyhound's collar on the bridge at Hampton Court is an erroneous addition, as will appear below.

[3] Anstis, *Register of the Garter*, i, p. 410, note u, citing the original patent then in his possession. Walker made little use of this grant, for in February 1649 Charles II gave him a new patent which replaced the greyhound on the cross by five leopard's faces of gold (*ibid.* pp. 413–14).

[4] p. 464. The original edition was published by Sandford himself in 1677. The 1707 edition, which is cited in this paper, was revised and enlarged by Samuel Stebbing, Somerset Herald. Sandford in the passage here quoted calls Elizabeth's grandmother Anne, confusing her with her grand-niece, the wife of Richard III.

[5] *Op. cit.* p. 64.

Swynford.[1] As there represented the greyhound has a leash attached to its collar, the end rolled into a neat ball beside its feet (pl. XLIII, *c*). This would seem to be a difference adopted by Beaufort to distinguish his hound from the unleashed beast used by his half-brother Henry IV, a use of which I shall have somewhat to say presently. It must have been these Beaufort beasts which moved Dorling to fasten a cord to the greyhound's collar at Hampton Court, for Sir Charles Peers speaks of the king's greyhound as 'for Beaufort', and I know of no other example of the royal beast wearing a leash with the exception of two achievements of the royal arms in the chapel of King's College, Cambridge,[2] and these cannot be regarded as authoritative, for they are the work of the same foreign craftsmen who so misrepresented Anne Boleyn's male griffin (p. 141 above). Peers and Dorling evidently accepted Willement's theory that Henry VII derived the beast through his mother, Margaret Beaufort. Hunter Blair certainly did so.[3]

Woodward appears at one time to have shared Willement's opinion that Henry VII took the greyhound as a Beaufort beast, for when dealing with the royal supporters in the original, 1892, edition of his *Heraldry British and Foreign* he calls it the 'silver greyhound (of Beaufort)' (p. 662). Later he changed his mind, for in the 1896 edition he calls it as supporter 'a white greyhound (of Nevile or Lancaster)' and as badge 'the silver greyhound of Lancaster' (vol. ii, pp. 223, 325). Even in the 1892 edition he had spoken of it as a Lancastrian beast (pp. 595, 605), but nowhere does he give either reason or authority for that description.

Willement thought that some apology was needed for differing from 'so high an authority as Sandford', but very little research was needed to show that Sandford, Willement, and Woodward were all alike at fault. It is true that a greyhound was for a time a Nevile beast; true too that it was once a Beaufort beast and once a Lancastrian beast. But it was neither for Nevile nor for Beaufort that Henry VII took it. It was not even as a symbol of the House of Lancaster that he chose it, though that is nearer the mark. For King Henry the greyhound was from Richmond, that great Yorkshire honour which Henry VI conferred on his half-brother Edmund Tudor, or Edmund of Hadham as he was then called. Several manuscripts of the Tudor and early post-Tudor periods assign the greyhound to Richmond, and both Sandford and Willement ought to have known that, for two of those manuscripts, Prince Arthur's Book and I. 2 were, and still are, in the library of the College of Arms of which Sandford was a member.[4] Both are quoted by Sandford in other connexions and it was from Willement's tracings of I. 2 that the illustrations were prepared for the De Walden Library volume *Banners, Standards and Badges*. One of those two manuscripts, the so-called Prince Arthur's Book, must certainly be regarded as authoritative, for it was compiled for and under the direction of Sir Thomas Wriothesley, who before his appointment as Garter King of Arms in 1505 had for some fifteen or sixteen years been Wallingford pursuivant to the Prince of Wales, first to Prince Arthur, and then to Prince Henry. Moreover, his father, John Wrythe, who was Garter from

[1] *Regal Heraldry*, pp. 59–60; *Heraldic Notices of Canterbury Cathedral*, 1827, pp. 40–42, 152; 'The Roof-Bosses in Canterbury Cathedral', by C. J. P. Cave, F.S.A., in *Archaeologia*, lxxxiv, 1935, p. 61.

[2] One is over the door leading from the choir to the south chapels; the other is in the passage through the choir screen.

[3] *Durham Seals*, no. 3051.

[4] See pp. 96 and 2 respectively; *Banners etc.*, p. 10.

1478 to 1504, must have begun his heraldic career soon after Edmund Tudor was made earl of Richmond and during the lifetime of his widow, Margaret Beaufort (d. 1509), and his younger brother Jasper, earl of Pembroke, duke of Bedford, and Earl Marshal (d. 1495). As Garter and Wallingford respectively Wrythe and Wriothesley must have known both Margaret and Jasper, and they could not fail to know how Edmund had regarded his greyhound. Both that manuscript and I. 2, which dates from about 1520, depict the greyhound upholding a banner of the Tudor white and green charged with a crowned red rose, the banner being named 'Kyng Henry the vij' and the beast 'Rychemont' (pl. XLII, *c*).[1]

Another Heralds' College manuscript, L. 14 Miscellanea Curiosa, though of somewhat later date, temp. James I, is even more explicit, stating that the greyhound as used by Henry VII was 'by the Earldome of Richmond, from antiquity belonging thereunto, for it was borne by Edmond his father for a Supporter. And I have seene the armes of the said Edmond and Margaret his wife impaled, supported with this greyhound on the right and a Bagwyne [*sic*, for yale] on the left side spotted with divers colours, which was one of the supporters of John Duke of Somersett her father. The Greyhound was one of the Supporters of Humphrey Duke of Gloucester who was Earl of Richmond also.'[2]

The greyhound is also assigned to Richmond in British Museum MS. Harl. 1073, fo. 14. This was written by John Withie, a well-known herald-painter in the time of Charles I, and apparently drew on the same source as L. 14.[3] Anstis too regarded the hound as a Richmond beast, for in a volume of *Heraldic Miscellanies* belonging to Mr. Wagner (p. 4326) he wrote: 'The greyhound Sandford, p. 463, brings from the Yorkists, but I take it from Richmond—I. 2', 'I. 2' referring to the manuscript mentioned above.

[1] College of Arms MS. M. 14 Records, fo. 5, names the crowned red rose as a badge of Richmond.

[2] Fo. 381*b*. This manuscript, which is cited hereinafter as L. 14, was given to the College of Arms by Sir William Dugdale while Sandford was still a herald, though perhaps not until after the publication of his *Genealogical History*. The same passage occurs also in Bodleian MS. Ashm. 1121, p. 236, where it is said to be copied from a manuscript in the custody of Sir Christopher Hatton. It is remarkable that the folios noted by Ashmole against this and other passages are those of L. 14, but it is not yet possible to say whether the manuscript which Ashmole copied was the now L. 14, or a copy of L. 14, or merely some manuscript drawn from the same sources. Considering the friendship and close collaboration between Hatton and Dugdale (see Wagner, *Catalogue of English Medieval Rolls of Arms*, p. 145 and xxij–xxv) either of the first two suggestions is possible. A version of this portion of L. 14 with the same paintings but a shortened text was given by Sir William Segar, Garter, to James I in 1604, and is now MS. Harl. 6085; it is entitled 'The Variation of the Armes and Badges of the Kings of England from the tyme of Brute untill this present yeare of our Lord 1604'. The script is a typical italic hand of the period, but its resemblance to that of the corresponding portions of L. 14 is so close (and the resemblance between the two sets of illustrations is even closer) that one wonders whether L. 14 was not written and limned by Segar, or at least under his direction, as a draft for Harl. 6085. Short accounts of the yale and bagwyn by the present writer will be found in *The Coat of Arms*, iii, 90 and 142.

[3] Willement quoted this as proving that Henry VII got the beast through Margaret Beaufort (*Regal Heraldry*, p. 60, note). It is, however, doubtful whether Margaret ever used the greyhound. So far as I have been able to find the only beasts which she used are the eagle and the yale which she got from her father Sir John Beaufort II, duke of Somerset and earl of Kendal. On two different seals, one used before and one after 1485 (casts *penes* Soc. Ant.), her shield is supported by two yales, the eagle standing on top of the shield in the earlier case and behind it in the later. Two yales also support her arms in various places in Christ's and St. John's Colleges at Cambridge (see Hope, *Heraldry for Craftsmen and Designers*, pp. 206, 209, 394–6, and *Country Life*, *loc. cit.*). It has been pointed out to me that the early sixteenth-century brass eagle lectern in the Chapel of Christ's College stands on four couched dogs. These, however, are made of a different alloy and may be an addition. In any case, even if they are meant for greyhounds, which is not certain, they are not by themselves sufficient evidence on which to argue that Lady Margaret used a greyhound as one of her beasts.

In the light of these statements it is impossible to doubt that for Henry VII and his family the greyhound stood for the earldom of Richmond, although, as will be seen presently, there was another consideration which may have made the creature even more attractive in Henry's eyes. There is on the other hand nothing in those manuscripts to show how the hound came to be associated with Richmond. L. 14's statement that the greyhound belonged to that earldom from antiquity suggests that the use went back before Edmund Tudor's creation as earl of Richmond in 1452, but I have found no evidence to support that. Indeed such evidence as there is points away from Richmond.

From the time of William the Conqueror until 1341 the honour of Richmond, in the North Riding of Yorkshire, was held by members of the ducal house of Brittany, the later holders styling themselves earls of Richmond. In 1342 the earldom, being then in the Crown, was granted to John of Gaunt, who held it until 1372 when he assumed the title of king of Castile and Leon and surrendered Richmond to the king. Both earldom and honour were then granted to John, duke of Brittany, but he having adhered to the king of France, they were in 1383 adjudged to be forfeited and in 1384 Richard II granted the honour to Queen Anne for life as part of her dower. For the next fifteen years the honour see-sawed between various English holders and the dukes of Brittany. Henry IV in October 1399, that is immediately after his accession, granted the 'castrum, comitatum, honorem et dominium' of Richmond to Ralph Nevile, 1st earl of Westmorland (*cr.* 1397) for life. Ralph, however, was not entitled earl of Richmond, and in 1414 that earldom was conferred on John, duke of Bedford, with the reversion of the castle, etc. on Westmorland's death, which happened in 1425.[1] On Bedford's death without issue in 1435 the earldom and its territory reverted to the Crown, but the duchess, Jaquetta of Luxembourg, retained a third part of the honour and the income therefrom as her dower. In 1452 Henry VI created Edmund Tudor, his half-brother, earl of Richmond, granting him the whole of the honour and all reversions thereto. Edmund married Margaret Beaufort in 1455 and died in 1456, leaving their only son, the future King Henry VII, about a year old. Henry kept the title of earl of Richmond until his attainder by Richard III in 1484, but the honour and territorial possessions seem to have been administered by the Crown. At first, no doubt, this was done on Henry's behalf, but Edward IV treated them as Crown property, and in 1462 they were granted first to Richard, duke of Gloucester (Richard III) and then, a few weeks later, to his brother George, duke of Clarence. On the latter's death in 1477 they were regranted to Richard, only returning to Henry after his victory at Bosworth.[2]

I have found no proof that any of the Breton earls of Richmond used a greyhound. Two things only, to my knowledge, might conceivably point to that. The first is the monument in the Abbey of St. Yved de Braine, near Laon, of Peter Mauclerc, count of Dreux and Braine and duke of Brittany, earl of Richmond, 1219–50. On this his

[1] It is an interesting fact that the earldom was granted to Bedford 'cum armis integris comitatui, honori ac dominio de Richmond annexis'. The arms are not blazoned but it is clear that the coat meant is: Checky or and azure with a bordure of England and an ermine canton over all—see 'The Arms of the Earldom of Richmond' by the present writer in *The Coat of Arms*, iii, 241.

[2] See the Victoria County History, *North Riding of Yorkshire*, i, 1–12; *Complete Peerage*, x, 821, etc. *sub tit.* Richmond.

effigy has a greyhound as footstool.[1] The second is a signet used by duke John V in 1408, when the honour was held by the earl of Westmorland. The device on this is described by Douët d'Arcq as a greyhound lying at the foot of a tree to which it is tied by a ring and leash.[2] It would be extremely rash to regard either of those objects as proof that the beast was used heraldically in the House of Brittany, but of the other persons named in the above recital five certainly used a greyhound either as badge or as supporter, namely John of Gaunt, Ralph Nevile, Edmund and Henry Tudor, and Richard of Gloucester, but only in the case of the two Tudors can the greyhound be positively connected with Richmond. For both Nevile and Gloucester the beast must certainly have had some other origin; for John of Gaunt also unless I am sadly mistaken.

Of Henry Tudor enough has been said already, and Edmund Tudor will be more conveniently considered at a later stage of this inquiry.

As for Sir Ralph Nevile, he used two greyhounds as supporters on his seal as early as 1388, even before he succeeded as Lord Nevile (pl. XLIII, *d*).[3] That was some eleven years before he was granted the honour of Richmond, so in his case the greyhound can have had nothing to do with that honour. Nor can it in the case of his grandson Ralph, the 2nd earl of Westmorland, who also used two greyhounds as supporters,[4] but who did not hold the honour of Richmond. On both their seals and also on one used by the elder Ralph as earl of Westmorland (*cr.* 1397) the greyhounds wear collars with conspicuous rings but no leashes.[5] The colour of those hounds is not known.

In the case of Richard, duke of Gloucester the only evidence which I have found is his seal as Admiral of Dorset and Somerset. The device on this is a ship, on the stern-castle of which stands a greyhound upholding a banner of the duke's arms.[6] As the duke held that post in 1461–2 and did not acquire the honour of Richmond until after the duke of Clarence's death in 1477 it is obvious that in his case also the origin of the greyhound must be sought elsewhere than in Richmond.

There remains only John of Gaunt. Here the evidence for his use of the greyhound is of considerable interest in the study of beasts and badges. At first sight it may appear inconclusive, but when read in conjunction with the use of the hound by his descendants it is enough to show that he did in fact use a greyhound as his beast. Such as it is the evidence consists of four entries in the Duchy of Lancaster Registers. At the New Year 1372 Gaunt gave to his sister-in-law Joan of Kent, then princess of Wales, 'un blanc leverer d'or ove viij saphirs' and at the same time he himself drew

[1] La Borderie, *Histoire de Bretagne*, iii, 299 quoted in *Complete Peerage*, x, 804, note h.

[2] *Inventaire des Sceaux . . . de l'Empire*, no. 556.

[3] Brit. Mus. *Catalogue of Seals*, nos. 12139 used in 1388 and 12138 used in 1391; Hunter Blair, *Northumberland and Durham Seals* (reprinted from *Archaeologia Aeliana*, 3rd ser., vols. xx, xxi), no. 576. The presence of the greyhounds on the 1388 seal proves that the beast was not acquired by Sir Ralph's marriage to Joan Beaufort (see pedigree A, pl. XLVII) for that marriage did not take place until 1397).

[4] Brit. Mus. *Cat. of Seals*, no. 12141; *Northumberland and Durham Seals*, no. 578. G. H. D. Longstaffe in his edition of Thomas Tonge's 1530 *Visitation of the North* (Surtees Soc. xli, 1863, p. 30) thought that the Nevile greyhound came from the FitzRandolphs.

[5] Brit. Mus. Cat. no. 12140; *Archaeologia*, lxxxix, pl. IX (*a*); *Northumberland and Durham Seals*, no. 577.

[6] British Museum, *Catalogue of British Seal Dies*, no. 27 and pl. III; *Cat. of Seals*, no. 1050; *Archaeologia*, vii, 69 and xlvi, 366; Hope, *Heraldry for Craftsmen*, p. 59.

from the Wardrobe, presumably as presents for other persons, 'trois leverers blankes sur terragez d'or'.[1] Later in that year, after his marriage to Constance of Castile, he bade the Clerk of the Wardrobe deliver to one of the duchess's women 'un botoner d'or et de perry [pierrerie] de viij leverers'.[2] Lastly in 1381 the duke bought from Herman Goldsmith for £18. 16*s*. 3*d*. 'une saler [salt-cellar] fait ove un leverer sur un tarage aymelle de vert'.[3] It may also be mentioned that in his will Gaunt left to his son, the future King Henry IV, bed-hangings and other articles of cloth of gold wrought with golden trees with a white 'alant' tied to each tree.[4] Although the word *alant* or *aland* was generally used for a dog resembling a mastiff, it was also used in the fourteenth century for a greyhound. To judge from the descriptions the pattern on those articles resembled the device on the signet mentioned above as used by John V of Brittany in 1408, but no significance can be attached to that.

As Gaunt only resigned the earldom of Richmond in 1372 it might be thought that he took the greyhound as a beast pertaining to that earldom, but the fact that he continued to use it long after his resignation and that it was used by some of his descendants who held neither the earldom nor the honour shows that his greyhound too had nothing to do with Richmond. In fact he inherited the hound from his father Edward III.

At least eight different beasts have been attributed to King Edward III. In topical verses of his own day he is variously referred to as the Boar, the Bull, the Eagle, and the Leopard. He used a griffin as the device on his secretum, he had a dragon as standard when on campaign; he named one of his kings of arms Falcon, and he also seems to have used a unicorn. But never, so far as I have found, has a greyhound been listed either among his badges or as a supporter. Nevertheless on the obverse of his fifth Great Seal, the so-called Bretigny Seal, which was used from 1360 to 1369, the king's effigy is flanked by two small shields of the royal arms each with a greyhound standing beneath it (pl. XLV, *a*).[5] In the past I regarded those two hounds as mere decoration, void of any heraldic significance. Now I realize that a greyhound was one of King Edward's beasts and that it was deliberately introduced as such on that seal. Confirmation of this was found in a totally unexpected quarter.

The Bretigny seal, a magnificent example of the seal-engraver's art, was also used with a modified legend from 1372 to 1377.[6] It was again used, with suitable alterations, or served as a model for Great Seals of Richard II, Henry IV, V, and VI and Edward IV.[7] On those of Richard II and the three Henrys the beasts are still greyhounds, but on Edward IV's first and second Great Seals, which were based on this model, they were changed into bulls. Neither of those seals is illustrated by Sandford and in the Wyons' description of them the beasts are called greyhounds. My suspicions were, however, aroused as soon as I saw the casts in the society's collection and when I examined impressions of the seals in the British Museum it was instantly

[1] *John of Gaunt's Register 1372–6*, Camden Soc. 3rd ser., xxj, 1911, no. 915. I have to thank Miss Margaret Galway for bringing this to my notice.

[2] *Ibid*. no. 1124. A 'botoner' is a set of buttons.

[3] *John of Gaunt's Register 1379–83*, Camden Soc. 3rd ser., lvj, 1937, no. 556.

[4] J. G. Nichols, *Royal Wills*, 1780, pp. 156–7.

[5] Wyon, *op. cit*. p. 37, pl. x, no. 63. Sandford does not illustrate this seal.

[6] *Ibid*. no. 65.

[7] *Ibid*. pp. 41, 43, 47, 56, 57, pl. XI, nos. 67, 71, XIII, nos. 77, 79, and XIV, nos. 81, 83.

apparent that the beasts are really bulls (pl. XLV, *c*).[1] Now the white lion of Mortimer and the black bull of Clarence were Edward IV's favourite beasts and two lions in the typical Mortimer attitude, gardant with their tails between their legs, sit beside the king's footstool on the same seals. In these circumstances we may be sure that Edward IV saw the greyhounds on his predecessors' seals as badges. He may indeed have counted them as Lancastrian beasts although they were originally placed there by Edward III.

In the light of those explanations there can be little doubt but that the five 'nouches' in the shape of white dogs studded with rubies on the shoulders, which were pledged by Richard II as security for loans made to him by the City of London in 1379 and 1380, really represented King Edward's greyhound.[2] We may also see that beast in the greyhounds ornamenting a belt of gold and pearls which belonged to Joan Holand, the second wife of John de Montfort, duke of Brittany and earl of Richmond. The belt and other jewels were pledged by the duke to one Richard Lyons, but in 1376, Lyons being a prisoner in the Tower of London, Edward III ordered the jewels to be released to the duchess.[3] Besides the greyhounds the belt was also ornamented with white eagles, and other jewels mentioned in that order were ornamented with stags, griffins, lions, and eagles, all beasts known to have been used by Edward III. One wonders therefore whether some at least of those jewels may not have belonged originally to the duke's first wife, King Edward's daughter Mary (d. 1361 or 1362 *s.p.*). The only jewel which has any apparent connexion with Brittany is an ermine made of 104 pearls with seven diamonds on the tail.

Nor was the use of the greyhound limited to King Edward himself. On the contrary there are grounds for thinking that the creature was used by every one of his five sons (ignoring those who died in childhood) either in person or in their descendants.

I have already referred to the beast's appearance on the Great Seal of Richard II and to its use by John of Gaunt and I shall have a good deal to say presently about its use by Gaunt's descendants. As for King Edward's other three sons, Lionel, duke of Clarence; Edmund, duke of York; and Thomas, duke of Gloucester, the evidence is as follows:

(*a*) Two salt-cellars 'en manere d'une cheon' are among the bequests made by Edmund Mortimer, earl of March, in 1381.

(*b*) Bed-hangings of red worsted embroidered with a white greyhound belonged to Thomas, duke of Gloucester.

(*c*) Three cups, of which two were enamelled with a greyhound and the third with kennets;[4] and

[1] This is seen most clearly on the impression attached to Harleian charter 43 E. 51 in the British Museum. Other impressions are on Harl. ch. 43, F. 1 and Cotton ch. viij. 13. There are also impressions in the Public Record Office and casts of both seals are in the collection of the Society of Antiquaries, but in none of those are the bulls so clear as on Harl. ch. 43, E. 51.

[2] City of London Letter Book H, ff. cviij, cxxix, quoted by H. T. Riley, *Memorials of London*, 1868, pp. 429, 443.

[3] Patent Roll 50 Ed. III, p. 1, m. 7, 2 July (1376); Rymer, 1830, iii, part 2, p. 1056. The belt is thus described in the patent: 'un seinture d'or et de perles ove neof barres d'or ovesque eegles blancz et entre chescun barre un leverer d'or ove un scochon de gris oept barres de perles en chescun barre douze grosse perles.'

[4] The *O.E.D.* defines a kennet or kenet (O.F. *chienet*, a little *chien*) as a small dog used in hunting. The word

(*d*) two clasps like fetterlocks with white greyhounds were among the treasures taken over by Henry IV when he forced Richard II to abdicate.

One of the difficulties in weighing evidence of this kind is to decide whether any particular object was used with heraldic intent or was merely decorative, and that difficulty is acute in the first two cases.

Edmund Mortimer's salt-cellars present a double problem. Does the fact that they were made in the shape, 'en la manere', of a greyhound point to the use of the hound as an heraldic beast? and if so was it the earl's own beast, or did he acquire the salt-cellars from someone else? Failing other evidence one can only guess at the answers, but it may be recalled that Edmund's will also mentions a salt-cellar 'en la manere d'une lyoun' and we know that a white lion was a Mortimer badge.[1] Moreover Edmund's wife was Lionel of Clarence's daughter and heiress and their son Roger Mortimer was Richard II's heir presumptive. It was in fact as the heir of Roger Mortimer and through him of the duke of Clarence that Edward IV claimed the crown of England. I think therefore that we may reasonably assume that the salt-cellar greyhounds were heraldic and that they were intended for Edward III's beast inherited by Mortimer through Philippa of Clarence.

The status of the greyhound on the duke of Gloucester's bed-hangings seems at first sight equally uncertain. Thomas of Woodstock, the youngest son of Edward III, was made duke of Gloucester in 1385 and was murdered in 1397. These bed-hangings were among the effects which were thereafter seized in his castle of Pleshy. They figure in the inventory as: 'Item, j cov'lit & test' de rouge worsted embroudez ove un leverer blanc, [value] iij.s.'[2] Here too I submit that it is not unreasonable to read the greyhound as the duke's beast inherited from his father.

We now come to the cups and clasps mentioned, under *c* and *d* above, as being part of the treasure taken over by Henry IV from Richard II. Within a few days of his accession Henry ordered many valuable articles to be removed from the Treasury of the Exchequer to the King's Chamber. The privy seal for this was dated 6th October 1399, but the objects do not seem to have left the Treasury for nearly two months, the treasurer's inventory being dated 20th November. This most interesting document was printed at length by Sir Francis Palgrave in *The Antient Kalendars and Inventories of the Treasury of his Majesty's Exchequer* (1836), iii, 313–58. It contains over 300 items, some including several different articles. According to the preamble the objects then delivered to the King's Chamber had previously belonged to Edward III, Richard II, Queen Anne, the duchess of York, the duke of Gloucester, and Sir

is found from the thirteenth century onwards. *The Boke of St. Albans* (1486) includes 'kenettys' among the 'diverse maner houndis' (dorse of leaf signed f. iiij), but these are not mentioned in Randle Holme's *Academy of Armory* (Bk. II, c. ix) which suggests that the word had gone out of use before 1688. In Charles's Roll, a painted roll compiled *c.* 1285, no. 101, Pers de Kenette bears Gules, three dogs argent. Perceval in editing this roll called the dogs 'talbots running' (*Archaeologia*, xxxix), and Foster called them 'talbots on the scent' (*Some Feudal Coats of Arms*, 1902, p. 121). It was left to Oswald Barron to identify them as kennets (*Encyclopaedia Britannica*, art. Heraldry). The association of the kennets with the greyhound on these cups makes me wonder whether they may not have been what are now called whippets or something similar. I must, however, admit that the kennets in Charles's Roll are more like talbots than whippets. Their posture is unusual and is well described by Foster's phrase 'on the scent'.

[1] J. G. Nichols, *Royal Wills*, 1780, pp. 112–13–14.

[2] *Arch. Journ.* liv, 1897, p. 291.

John Golafre, but no attempt is made to show which items had belonged to which. A few months later, in May 1400, the two clasps and one at least of the cups, together with a quantity of other treasures, were pledged to William More, citizen and vintner of London, as security for a loan made by him to the king.[1]

The cups and clasps appear in the November inventory as items 32, 33, 38, and 222:

32. Item un autre haut coupe d'arg' endorrez, le founs enaymellez dedeinz et le covercle enaymellez dedeinz ove j. leverer, gravez par dehors ove oysell' et babeuenry,[2] pois' ij. lb. di'. unc'.

33. Item un autre haut coupe d'arg' endorrez, enaymell' en le founs d'un rose deux knettes [*sic*, for kennets?] et un lever [*sic*, for leverer], gravez dedeinz et dehors ove treiles et roses, le pomell' sur le covercle enaymellez et rumpuz, pois' ij. lb. iiij. unc' et di'.

38. Item un coupe fait d'un gripesei [griffin's egg] garnisez d'arg' endorrez steant sur un pee de iij kenettes & le coverkel enaymellez dedeinz & dehors ove ij. kenetts, pois' ij. lb. vj. unc' & di'.

222. ij nouches a guise de fetrelokkes ove ij. leverers blancz, dont un nouche apparell' de ij. saphirs un doublet rouge et iiij. troches chescun contenant iiij. perles et un diamand', et l'autre nouche d'un baleys febles un saphir et iiij. troches chescun de iiij. perles et un deamant, pois' vij. unc' & di'.

On the clasps the presence of the fetterlock proves that the greyhound was an heraldic beast, but it leaves the question of its ownership open. On the one hand we know that both the fetterlock and the greyhound were badges used by John of Gaunt, and although he is not named among the former owners of the treasures several items in the inventory are clearly associated with him, as for example a silver-gilt basin engraved with a collar of SS 'del livere de Mons[r] de Lancastre' (item 52). On the other hand the inventory does name among former owners the duchess of York, that is Edmund of Langley's first wife, Isabel of Castile, who died in 1394, and the fetterlock was much better known as a Yorkist badge.[3] It is therefore probable that these clasps had belonged either to the duke or to the duchess of York, and in that case we must add the greyhound to the already long list of Yorkist badges. This is moreover confirmed by the use of the greyhound by Richard, duke of Gloucester, to which attention has already been invited, and by its use still later by Edward IV's base son, Arthur Plantagenet, whose seal as Vice-Admiral of England (pl. XLIII, *b*), resembles his uncle's in having a lighted cresset on the forecastle and a greyhound with a flag on the stern-castle.

But, although it would seem that the greyhound was used by all Edward III's sons or their issue, it is with the House of Lancaster that it was most intimately connected. The use of the greyhound by John of Gaunt and by Sir John Beaufort, the eldest of his sons by Catherine Swynford, has already been considered. It has also been

[1] J. H. Wylie, *History of England under Henry IV*, iv, 1898, pp. 194, 196, citing a manuscript in the Public Record Office, Q.R. Wardrobe 68/1.

[2] i.e. babewynery or baboonery, probably used here in the sense of grotesques.

[3] One of the jewels taken over by Henry IV and pawned in 1400 was a livery collar of the duke of York, 'Item j. livere de Duc' de Everwyk' ove vij. linkettz et vj. faucons blancs d'or aymellez, pois' v. unc' ' (Palgrave, item 231; Wylie, *op. cit.* p. 196). J. G. Nichols suggested that 'linkettz' may be a clerical error for lokets, i.e. fetterlocks ('On Collars of the Royal Livery', p. 18). In view of the frequent association of the falcon and the fetterlock that seems a plausible suggestion, but it is no less possible that the 'linkettz' were merely links joining the falcons together.

pointed out that the greyhound figured on the Great Seals of Henry IV, V, and VI, but that is by no means the whole story.

The fact that a white greyhound was one of Henry IV's beasts has hitherto attracted little attention, although it was evidently known to Shakespeare, for in *Henry IV* (Part I, Act 1, end of scene 3) he makes Hotspur refer to Henry as 'this fawning greyhound'. The beast is not attributed to Henry in any of the collections of badges known to me, and the only modern author to mention it is Sir Edward Maunde Thompson in his edition of the Chronicle of Adam of Usk.

Adam, who knew Henry personally, says with reference to the events of 1399 that Henry was rightfully called the dog, by reason of his badge of a collar of linked greyhounds, and because he came in the dog-days, and because he utterly drove out of the kingdom the faithless harts, that is the wearers of Richard II's white hart badge: 'merito canis, propter liberatam collariorum leporariis conveniencium; et quia diebus canicularibus venit; et quia infidos cervos, liberatam scilicet regis Ricardi in cervis excistentem, penitus regno affugavit.' Commenting on that passage Maunde Thompson suggested that Richard's white hart might perhaps have suggested Henry's use of the greyhound at that time and with the significance pointed to in the text. The notion is ingenious and may be correct in that limited sense, but, as will be apparent to readers of this essay, it must not be thought that the beast was then assumed by Henry for the first time, for it had been his father's beast and Henry certainly used it as such. On the other hand it may be that he gave it more prominence at this time because of its appropriateness to his chase of King Richard.[1] Maunde Thompson also referred to the poem *Richard the Redeles*, wherein the reference to 'the good grehonde' has been a stumbling-block to editors. This has been variously interpreted as meaning John Beaufort, earl of Dorset, and Ralph Nevile, earl of Westmorland, but Henry IV is a more plausible interpretation.

The above passage from Adam's chronicle would alone suffice to prove Henry's use of the greyhound, but this is confirmed by the chronicle known as 'Traïson et mort de Richart II', which mentions 'armigeri ducis Lancastrie deferentes collistrigia quasi leporarii',[2] and by Henry's gift to St. George's Chapel of a set of vestments and altar-hangings of blue woven with white dogs.[3] The inclusion of a collared greyhound among the badges carved on the roof of St. Andrew's church, Mildenhall, Suffolk, further corroborates Henry IV's use of the beast. J. G. Waller, in his paper 'On the Roof of the Church of St. Andrew, Mildenhall', thought that 'this cannot be specifically assigned',[4] but the roof was erected in the first half of the fifteenth century, and it displays such well-known Lancastrian badges as the swan and antelope, so we need not scruple to give the greyhound to Henry IV. It may also be mentioned that,

[1] *Chronicon Adae de Usk*, edit. Sir E. Maunde Thompson, 2nd edit. 1904, pp. 25, 173. In this connexion it is worth recalling the story of the greyhound, Math, which was King Richard's inseparable companion only to desert him a little before his enforced abdication when it attached itself no less closely to Henry. The story is told, though with some variation in the details, both by Adam (pp. 41, 196) and by Froissart (Johnes's translation, 1844, ii, 692).

[2] Brit. Mus. MS. Harl. 1989, fo. 18, quoted by Maunde Thompson, *ibid.*

[3] *The Inventories of St. George's Chapel, Windsor Castle, 1384–1667*, ed. M. F. Bond (Historical Monographs relating to St. George's Chapel, Windsor, 1947), pp. 44–45, no. 84 from the inventory of 1384: 'Item de dono Regis Henrici quarti j. vestimentum blodij coloris intextum cum albis canibus.'

[4] *Archaeologia*, liv, 1895, p. 265.

according to Willement, the soffit of Henry IV's monument in Canterbury Cathedral was originally painted with a design of eagles and greyhounds, though this was afterwards overpainted with a different design in which genets or ermines replaced the greyhounds.[1]

I have already drawn attention several times to the passage in Adam of Usk's Chronicle,[2] but, surprisingly, no one else seems to have noticed it. Yet the parallel between Henry IV's deposition of Richard II and Henry VII's defeat of Richard III could hardly be more striking. We may surely believe that Henry VII saw the parallel, and that it goes some way to explain his partiality for the greyhound.

Besides Henry IV the greyhound was also given, or is said to have been given, by three of his four sons, Henry V, Thomas, duke of Clarence, and Humphrey, duke of Gloucester,[3] as well as by his grandson Henry VI.

Not only did Henry V display the greyhound on his Great Seal, but he named one of his officers of arms from it. Blanchlyverer pursuivant occurs in 1418 or 1419, and although I formerly assumed that he was the servant of one of the Mauleverer family, I now feel certain that he was a Crown officer.[4]

For the duke of Clarence Doyle's *Official Baronage* (i. 398) names as his badge a greyhound with a plain collar, but the source of the information is not shown and so far I have found nothing to corroborate it.

It was no doubt to Duke Humphrey that MS. L. 14 referred in the passage quoted above (p. 148), albeit the statement that he was earl of Richmond is mistaken. It is possible that he held for a time some parcel of the honour of Richmond, but I have seen no record of that and he certainly never had the earldom. On the other hand it is true that he sometimes used a greyhound as a supporter. Nicholas Charles, Lancaster Herald 1608–13, noted in the windows of the old church at Greenwich several armorials which must have been given by the duke when he was living there about 1440. These consist of (1) a shield of his own arms; (2) a shield of his arms impaling Cobham for his second wife; (3) a figure of the duke wearing a tabard of his arms; (4) his crest on a mantled helm upheld by a white antelope sejant, crowned about its neck and chained; and (5) a gartered shield of sable charged with three ostrich feathers and supported on the dexter by a white greyhound with a gold collar and leash and on the sinister by a white antelope with horns, crown about its neck and chain of gold (pl. XLII, *e*). The greyhound's leash has the end rolled rather like those in the Warriors' Chapel at Canterbury.[5] The antelope is of course familiar as a Bohun badge brought to the House of Lancaster by Humphrey's mother Mary Bohun, wife of Henry IV. On Humphrey's seal and also on his monument his arms are supported by two antelopes and this glass seems to be the only authority for his use of the grey-

[1] *Heraldic Notices of Canterbury Cathedral*, p. 51.

[2] In lectures on the Royal Arms, in the above-cited paper on the roof-bosses in St. George's Chapel, and in *The Queen's Beasts*, 1954, p. 44.

[3] Henry IV's other son, John, duke of Bedford, is not known to have used a greyhound as his beast. His favourite badge was the *racine*, root or uprooted tree-stump, and the only supporters for which I have found any evidence are the eagle and yale, the same which were afterwards taken by his successor in the earldom of Kendal, Sir John Beaufort II.

[4] See *The Antiquaries Journal*, xxxiv, 1954, p. 238.

[5] Brit. Mus. MS. Lans. 874, fo. 113*b* cited and the sketches reproduced in *The Topographer and Genealogist*, i, 1846, p. 59; Coll. Arm. MS. L. 14, fo. 105*b*; Bodleian MS. Ashm. 1121, p. 228. Greenwich church fell down in 1710.

hound. The leash, as on Sir John Beaufort's hound, may be a difference distinguishing Humphrey's greyhound from the king's.

Henry VI, so far as I have found, did not show any particular fondness for the greyhound as a badge, but it was engraved on his Great Seal, and it was by his gift that the beast was used by the Tudors and the Wydevills.

Edmund Tudor was not of the royal blood of England, but was, as readers hardly need to be reminded, the eldest son of Henry V's widow, Catherine of France, by her second husband, Owen Tudor. He was therefore a uterine brother of Henry VI, who, besides creating him earl of Richmond, gave to him and to his younger brother, Jasper, earl of Pembroke, differenced versions of the royal arms, namely to Edmund: France and England quarterly in a border azure charged with gold martlets and fleurs-de-lis alternately, and to Jasper the like but with martlets only on the border. In their composition these coats differed no whit from those assigned to some royal cadets,[1] and their only justification was King Henry's royal grace and favour. With this coat, which he wore in lieu of his paternal arms, Gules, a chevron between three helmets silver, Edmund used as crest a red wyvern on a chapeau and as supporters a red-collared, white greyhound and a red dragon.[2] No record of the grant of either coat has been found and it is not known when the grants were made, but it is inconceivable that the two brothers could have assumed such arms of their own motion, and it must be presumed that they were actually granted by the king. There is also every likelihood that the grants were simultaneous with the brothers' creation as earls of Richmond and Pembroke respectively. That being so it follows that Edmund's use of the greyhound preceded his marriage to Margaret Beaufort and that the greyhound cannot have been used in her right. On the contrary it is, I think, manifest that Edmund's greyhound is no other than the royal beast inherited by Henry VI from his great-great-grandfather Edward III and granted by him to his half-brother on his creation as earl of Richmond. That the beast had any previous connexion with Richmond I do not believe, nor is there any reason to think that the hound was expressly granted as for that earldom. Nevertheless, just as Edmund's red dragon supporter was an obvious allusion to his Welsh ancestry, so the Tudor heralds deemed the greyhound to refer to his earldom and that view remained undisputed at least until the seventeenth century. Not until after the Restoration does any other explanation seem to have been even mooted. Then Sandford propounded his theory that Henry VII used the greyhound in right of his wife Elizabeth of York and that she inherited it from her grandmother Cecily Nevile. That theory, however, as we have already seen, was by no means universally accepted and it is in fact indefensible. Albeit Cecily's father and nephew, the 1st and 2nd earls of Westmorland, used greyhound supporters, there is nothing to suggest that Cecily herself did so, and the supporters on a seal which she used in her widowhood are a hart and a lion.[3] In this

[1] Richard of Coningsburgh, for example, bore France and England quarterly in a silver border charged with purple lions, and Thomas Beaufort bore France and England quarterly in a border gobony of silver and France.

[2] Doyle's *Official Baronage*; A. C. Fox-Davies, 'Is the Red Dragon Welsh after all?' in *The Genealogical Magazine*, vi, 1902, p. 239. Neither work cites any authority.

[3] *Archaeologia*, lxxxix, pl. xvii (*a*); Brit. Mus. *Cat. of Seals*, no. 12093. Hunter Blair in *Northumberland and Durham Seals*, no. 554 miscalled the dexter supporter an antelope. The shield on that seal bears the undifferenced

connexion it is of some interest that among Charles II's illegitimate issue a greyhound was granted as a supporter to the dukes of Grafton, Northumberland, St. Albans, and Southampton, but not to the duke of Richmond. This shows that Charles II and his advisers did not associate the beast with Richmond.

Elizabeth Wydevill was married to King Edward IV in 1464 and thereafter she used a seal, SIGILLUM ELIZABETH DEI GRACIA REGINE ANGLIE ET FRANCIE ET DOMINE HIBERNIE, as the legend runs, with a crowned shield of the royal arms impaling Wydevill (pl. XLV, *d*). The dexter supporter is the white lion of Mortimer. The sinister supporter is a greyhound with collar and chain. The latter was read by Sandford as King Edward's beast, and said to be derived from his mother Cecily Nevile (p. 407). In that Sandford was doubly wrong. In the first place, even if King Edward did, like his brother Richard III, use a greyhound in addition to his other beasts, he must have derived it from Edward III and not from the Neviles. In the second place it is quite clear that this greyhound was not the king's beast but Elizabeth's. The fact that the hound stands as the sinister supporter of a shield bearing the impaled arms of England and Wydevill is not by itself conclusive, but any lingering doubts are dispelled by an examination of the seal, for there the beast, unlike the royal hounds, is liberally and conspicuously powdered with roundels. There is no sign of these roundels in Sandford's engraving of Elizabeth's seal (p. 374), but on one used by her father, Sir Richard Wydevill, afterwards Lord Rivers, the two greyhound supporters are even more conspicuously spotted. They too, like that on Elizabeth's seal, are collared and chained (pl. XLV, *b*).[1] The legend on this seal: 'Sigillum Ricardy Wydevyll militis', shows that it was cut between 1426 when Sir Richard was knighted and 1448 when he became Lord Rivers. Two greyhounds also support the arms on another seal which Sir Richard used in 1445 as Captain of Alençon and Fresnay-le-Vicomte, but this is too small for the roundels to be shown.[2] I have found no earlier evidence for the greyhound as a Wydevill beast than those seals. Indeed it appears to have been adopted after 1423, for in that year Richard Wydevill esquire, Elizabeth's grandfather, then chamberlain to the duke of Bedford, used a seal with two bears as supporters.[3] That being so we shall not be far out if we take it that the greyhound was first used by the future Lord Rivers, and that it is the royal beast differenced by the addition of the pellets. Whether the hound was granted to him in the duke of Bedford's lifetime or after his death is an open question. It may even be that it dates from his marriage about 1436 to the duke's widow Jaquetta of Luxembourg. In any case, whatever the particular circumstances in which the greyhound

royal arms impaling Nevile, and this use of the undifferenced royal arms is notable, for although Cecily's son was king, her husband was not.

[1] The matrix of Sir Richard's seal is in the Guildhall Museum, London. Casts both of it and of Elizabeth's seal are in the collection of the Society of Antiquaries. On Sir Richard's seal the powdering of roundels extends to the very tips of the hounds' tails so that these look almost as though they were wreathen like a unicorn's horn.

[2] Demay, *Inventaire des Sceaux de la collection Clairambault*, Paris, 1885, no. 9685. The arms both on this and on the Guildhall matrix are Wydevill (Argent, a fess and canton gules) quartering Prowes (Gules, an eagle or). The crest on the 1445 seal is described by Demay as a savage but it is probably meant, as also that on the Guildhall seal, for the richly garbed warrior brandishing a scimitar which appears on Sir Richard's Garter Plate (Hope, *Stall Plates of the Knights of the Garter*, pl. lx) and on that of his son Sir Anthony, 2nd earl Rivers. The supporters on the 1445 seal Demay calls rams, but Dr. Paul Adam-Even kindly examined the seal for me and he reported that they are undoubtedly greyhounds.

[3] Demay, *op. cit.* no. 9684. This seal also was examined by Dr. Adam-Even who confirmed Demay's reading of the supporters as bears.

came to be adopted as a Wydevill beast, Sandford was wrong in identifying the creature with Edward IV and the Neviles.

There is of course nothing on the seals to show the colour of the Wydevill greyhounds, and there are no supporters either on Sir Richard's Garter Stall-Plate or on that of his son, Sir Anthony, the second earl. It is, however, probable that the hounds were white powdered with black roundels.[1]

It is a long road from Edward III to the Wydevills, and I should have stopped at this point had not Mr. Wagner reminded me that several other greyhound-users were connected in one way or another with the royal house. It might be over-bold to affirm that the following greyhounds came from the royal kennels, but I have found no other explanation for them, and until one is forthcoming I shall deem that probable.

In 1436 Sir Thomas Swynford, Catherine Swynford's son by her first husband, used a seal in which the sinister supporter is a dog-like creature wearing collar and chain.[2] As Sir Thomas was John of Gaunt's step-son (see pedigree B, pl. XLVIII) it is not unlikely that this was whelped by the duke's greyhound.

In 1466 among the gear which John de la Pole, duke of Suffolk (see pedigree B) had removed to Ewelme were several vestments 'of greyhounds' and a pyx-canopy *wit alaunts*.[3] Whether these were heraldic beasts is uncertain, but towards 1530 Garter Wriothesley noted among the insignia used at the funeral of one of the Harcourt family a blue pennon charged with a leaping white greyhound with a red-edged gold collar (pl. XLII, *f*).[4] A greyhound is not usually included either among the Pole or among the Harcourt beasts, but in 1574 Richard Lee, the future Clarenceux king of arms, recorded that the hatchment of Sir John Harcourt, then hanging in the Bear Inn at Oxford, included quarterings for Pole and Burghersh.[5] Sir John, who died in 1565, was not in fact descended from those families, but his great-grandfather Sir Richard Harcourt had taken as his third wife Catherine, daughter and heiress of Sir Thomas de la Pole. Sir Thomas was a brother of William, 1st duke of Suffolk, and uncle of John above-named, and William's wife was Alice, daughter and

[1] In Wrythe's Garter Armorial Sir Anthony's arms have as sinister supporter a nondescript creature which is white with a powdering of black roundels, but without collar or chain, no. 78. On this manuscript see Wagner, *Catalogue of English Medieval Rolls of Arms*, p. 122. Whatever this beast is meant for it is quite unlike the clearly drawn greyhounds in other Tudor manuscripts. Moreover in College of Arms MS. L. 14, fo. 93*b*, and in Bodleian MS. Ashm. 1121, fo. 225 (perhaps copied from L. 14) there is a drawing of the arms of Edward IV impaling Wydevill, which is said to have been tricked in 1602 from a north window in Westminster Abbey. Here the shield is supported by the king's white lion on the dexter and on the sinister by a cat-like creature with a boar's tushes and with a gold collar and chain. This too is white speckled with black roundels. It is evidently meant for a panther or a leopard, probably the former. In any case it is too carefully and precisely drawn to be a misreading or misrendering of the Wydevill greyhound. Moreover in discussing the point with Mr. L. E. Tanner, V–P.S.A., who by an odd coincidence had inadvertently blazoned the Ashm. 1121 version as a greyhound (*Archaeologia*, xciii, 162), he reminded me that Elizabeth Wydevill was a generous benefactor to the abbey, and opined that the achievement was probably a royal gift. In that event it would be the work of the King's Glazier, an official sure to be well informed on such matters. On the whole therefore it seems not unlikely that some time after Elizabeth's marriage to Edward IV she and her brother discarded the greyhound, with its strong Lancastrian associations, and replaced it by a panther, whilst retaining the spots which are such a prominent feature alike on the seals and in the manuscripts. It is perhaps not irrelevant that both the greyhound and the panther were royal beasts.

[2] Broken seal attached to Brit. Mus. Add. ch. 365 (Catalogue, no. 13809) and to a charter among the Kettlethorpe (Lincs.) muniments communicated to the Royal Archaeological Institute in 1864 (*Arch. Journ.* xxi, 257).

[3] *Historical Notices of the parishes of Swyncombe and Ewelme* by H. A. Napier, 1858, p. 127, citing an inventory among the Ewelme Alms-Houses muniments.

[4] College of Arms MS. Vincent 153, p. 208.

[5] *The Visitation of Oxfordshire*, Harl. Soc. v, 117.

heiress of Thomas Chaucer and Maud Burghersh. Furthermore Thomas Chaucer's mother, Philippa Roet, was a sister of Catherine Swynford. If the Harcourts were so proud of the Pole-Chaucer-Burghersh connexion as to quarter the arms although they had no trace of that blood, then it seems at least possible that both their greyhound and also that on the Ewelme vestments hark back to the royal beast used by John of Gaunt. Of course if Thomas Chaucer was a bastard son of Gaunt as has been suggested, the case for identifying the Pole and Harcourt greyhounds with Gaunt's beast would be very strong indeed. But even though that be a baseless rumour the identification is not unplausible. My last two suggestions are, however, more easily digestible.

In 1397 Beatrice Stafford, Lady de Roos, used as supporters on her seal two greyhounds sejant, with collars and leashes. Beatrice, who died in 1415, was a daughter of Ralph, 1st earl of Stafford, and was married successively to Maurice FitzMaurice, earl of Desmond (*ob.* 1358), to Thomas, Lord Roos (*ob.* 1384), and to Sir Richard Burley (*ob.* 1387) —see pedigrees C and D, pl. XLIX. Her seal displays a shield tierced paleways with the Stafford chevron in the centre, the three bougets of Roos on the dexter and on the sinister the coat of Burley, Barry with the chief paly and a scocheon over all (pl. XLIII, *f*).[1] Here too I can find no explanation of the greyhound unless it was derived from the royal beast. Nor need anyone boggle at that suggestion. Beatrice herself was a great-granddaughter of King Edward I. Her brother Sir Ralph Stafford (*ob. v. p.* 1361) was the second husband of Maud of Lancaster, and Maud's daughter by her first marriage, Elizabeth de Burgh, was the wife of Lionel, duke of Clarence. Furthermore Beatrice's nephew, Edmund, earl of Stafford 1395–1403, was at the very time when she was using those greyhounds the husband of Anne, daughter and heiress of Thomas of Woodstock, duke of Gloucester, and they were the parents of Humphrey, duke of Buckingham, who valued this royal descent so highly that he wore his mother's arms, Old France and England quarterly in a silver border, in preference to his ancestral chevron. Moreover his grandson Henry, who succeeded as duke of Buckingham in 1459, obtained from a chapter of the heralds in 1474 a formal resolution authorizing his use of Anne's arms in lieu of the chevron.[2]

About 1530, a greyhound was the principal device on the standard of Sir Walter Devereux, Lord Ferrers of Chartley and afterwards 1st Viscount Hereford (*cr.* 1550, *ob.* 1558)—see pedigree E, pl. XLVIII. This greyhound is white like the royal beast, but has red ears and a gold crown about its neck (pl. XLII, *d*).[3] Nevertheless I take it to

[1] Brit. Mus. MS. Harl. 5804, fo. 320*b*. For later impressions of the same seal see Brit. Mus. *Cat. of Seals*, nos. 13073–4. There is also, among the collections for the *New Dictionary of British Arms* at the Society of Antiquaries, a note by the late Sir W. St. J. Hope that an impression of the same seal in the Public Record Office is attached to a document dated 12 Ric. II, 1389–90. The reference is, however, omitted and it has not yet been possible to trace the document or to verify the date. The point is, however, unimportant and does not affect the argument in the text for in 1389 Anne of Gloucester's husband was Beatrice's eldest nephew, Thomas, earl of Stafford 1386–92. The anchor which surmounts the shield on this seal is so prominent that it must have some significance, but what that may be I have failed to discover.

[2] Sandford 234. Both Humphrey and later dukes sometimes sealed with: Quarterly, 1. Woodstock; 2. Bohun of Hereford; 3. Bohun of Northampton; 4. Stafford.

[3] Coll. Arm. MS. I. 2, p. 115; *Banners etc.* p. 147; 'Wriothesley's Funeral Banners', Brit. Mus. MS. Add. 45132, p. 84. Nowadays Lord Hereford's beast has become a talbot, but in those two manuscripts it is certainly drawn as a greyhound.

be a differenced version of the royal beast, for Sir Walter had a double royal descent. His mother Cecily Bourchier was a granddaughter of Edward IV's aunt Isabel (daughter of Richard, earl of Cambridge) by Henry Bourchier, 1st earl of Essex (*cr.* 1461), and Henry Bourchier was the son of the above-named Anne of Gloucester by her third husband William Bourchier, earl of Eu.

Another family which must be mentioned in this connexion is that of Clinton, of whom Woodward observed that 'the Lancastrian greyhounds' are still the supporters of the dukes of Newcastle, the earls Fortescue, and the barons Clinton, all descended from the old Lords Clinton.[1] It is true that two greyhounds argent, collared, and lined, or in Lord Fortescue's case ducally gorged and lined, gules are the supporters of those three peerages, but there is no apparent reason for identifying those with the royal beast. The Clintons' use of the greyhounds goes back at least to the first decade of the fifteenth century, for two greyhounds, collared and ringed, support the shield on the seal of William, Lord Clinton and Say in 1408–9, and on that of John, Lord Clinton and Say in 1437–8.[2] That was during the supremacy of the House of Lancaster, but neither of those men was of the blood royal or even nearly allied to the royal family.

Lastly we must not forget the silver greyhound which, as mentioned already (p. 143), has long been the most distinctive feature in the badge of the Queen's Foreign Service Messengers, and which also figured in the badge worn by the Messenger of the Order of the Bath.

According to the Statutes of 23rd May 1725, instituting the Order of the Bath, the Messenger of the Order was to wear 'on his breast, hanging to a golden chain, one Imperial Crown of gold',[3] but Pine's engraving of the procession and insignia at the inaugural installation shows the Messenger's badge as an oval scocheon of blue enamel charged with a white greyhound courant between three imperial crowns set one and two as in the arms of the order, the scocheon being surrounded by the circlet and motto of the order and ensigned with an Imperial crown, pl. XLVI, *a*.[4]

In the case of the Foreign Service Messengers various theories have been advanced to explain their use of the greyhound. In *The History of the King's Messengers*, V. Wheeler-Holohan, himself a member of the corps, printed a memorandum written in 1808 by 'Sir' Levett Hanson and attributing to a former Fellow of the Society, John Charles Brooke, Somerset Herald 1778–94, the statement that the service of King's Messengers and the office of Somerset Herald were instituted by 'John Beaufort, Duke of Beaufort and Duke of Somerset', and that as a compliment to him both messengers and herald were ordered to wear the duke's 'Crest or cognizance, a greyhound courant argent' pendent in the one case from their scocheon or badge and in the other case from his herald's collar of SS.[5] This story probably stemmed from Hanson misreading as a greyhound the white Horse of Hanover which was a promi-

[1] *Heraldry British and Foreign*, 1892, p. 605; 1896, ii, 236.

[2] Brit. Mus. *Cat. of Seals*, no. 8689; MS. *penes* Dr. H. Bowditch, F.S.A., lxv, 19.

[3] Sir N. H. Nicolas, *History of the Orders of Knighthood*, iii, Order of the Bath, p. 62, art. xviij.

[4] John Pine, *Procession of the Order of the Bath*, 1730, pl. VI. I have to thank Mr. J. L. Nevison, F.S.A. for calling my attention to this badge.

[5] V. Wheeler-Holohan, *The History of the King's Messengers*, 1935, pp. 130–3.

nent feature in the collar of SS as worn by Brooke and his fellow heralds of that day. In any case the memorandum contains so many palpable errors that no credence whatever can be given to it.[1]

More interesting is a tradition or legend that during his exile in the Netherlands Charles II had with him a silver dish ornamented with little greyhounds, and that he broke these off and gave them to the members of his secret courier service as a means of identification. It was to commemorate this, so runs the tradition, that on his Restoration Charles ordered the Royal Messengers to wear a silver greyhound.[2] The details of this story are too picturesque to be altogether credible, but it is not impossible that the silver greyhound was assigned to the messengers by Charles II. As to that, however, there is no certainty. All that can be averred is in the first place that, although a large achievement of the royal arms is emblazoned on his doublet, there is no greyhound to be seen on the effigy in Llandegfan church, Anglesey, of Thomas Davis (*d.* 1649), First Messenger in Ordinary of Charles I's Chamber.[3] Secondly it appears from records in the Jewel Office that under William and Mary the messengers wore badges embodying the royal arms and supporters, but those records say nothing of any greyhound. The earliest mention of the greyhound known to Wheeler-Holohan is in 1758, when one of the messengers reported the loss of the arms and greyhound from his badge, thereby rendering it useless. Wheeler-Holohan nevertheless goes on to say that it is apparent from surviving specimens that the greyhound was in use long before 1758, though he does not venture to date more closely that 'prior to 1761' the earliest specimen which he records (pl. XLVI, *c*).[4] At that time, and under each of the succeeding sovereigns down to and including Queen Victoria the messengers' badge comprised the royal arms, with or without supporters, with a silver greyhound pendent beneath; but since the reign of Edward VII the royal arms have been replaced by the royal cipher (pl. XLVI, *b*).

Whether the silver greyhound was incorporated in the badge of the Messenger of the Bath because it was already being worn by the Foreign Service Messengers or vice versa we may never know, but the former seems the more likely. In either case we may safely assume that the messengers' greyhound is the royal beast, and that it was chosen in preference to any of the other royal beasts as typifying the speed at which the messengers were expected to travel.

To sum up, the conclusion of the matter is plain. The royal greyhound was Edward III's beast.[5] That accounts for its use by John of Gaunt and his descendants, by Richard II, Richard III, and perhaps by other members of the House of York. It would account for the use of the beast by Thomas of Woodstock and even by Edmund Mortimer, whose wife was the heiress of Edward's third son Lionel of Clarence. It may also explain the use of a silver greyhound by the Queen's Messengers

[1] It is examined in more detail in *The Coat of Arms*, iii, 327–9.

[2] Wheeler-Holohan, *op. cit.* p. 134.

[3] *Ibid.* pp. 7, 8.

[4] *Ibid.* pp. 134 sqq.

[5] Since this paper was written Miss Margaret Galway has called my attention to the passage in Froissart's *Le Paradis d'Amour* where the poet dreams that he is at the court of King Amours (Froissart, *Poésies*, ed. A. Scheler, Brussels, 1870–2, i, pp. 1–52, lines 860–920). If, as is generally agreed, Amours is meant for Edward III the prominence of white greyhounds at and near the Court confirms that these were one of Edward's royal beasts, and moreover shows that they were white, a point on which evidence had hitherto eluded me.

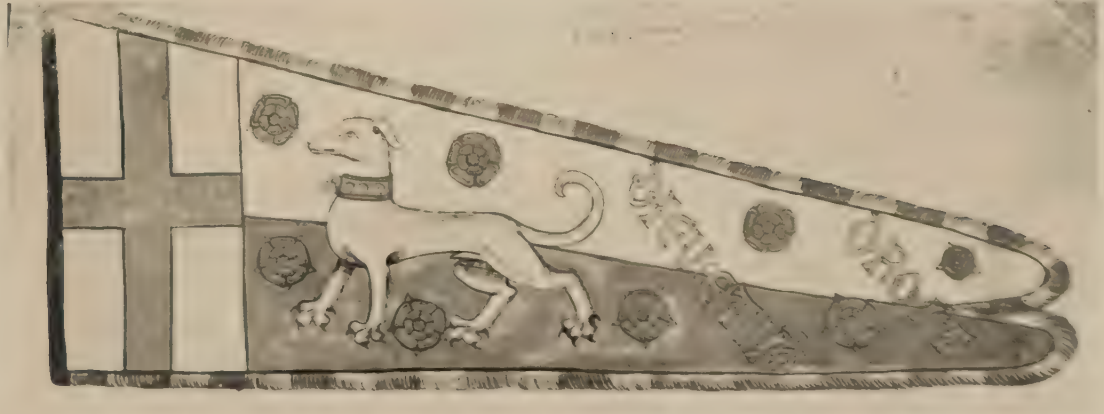
and by the Messenger of the Order of the Bath, and its occasional use in the families of Swynford, Harcourt, Pole, Devereux, and Wydevill. From John of Gaunt the greyhound was inherited both by Henry IV and by Sir John Beaufort, but whereas later Beauforts seem to have abandoned it in favour of the eagle and yale, Henry V and Henry VI continued to use it, and the latter granted the beast to his half-brother Edmund Tudor, from whose son Henry VII the royal greyhound has descended to her present Majesty, Queen Elizabeth II.

a. Arms of Henry VII from Povey's Tract, College of Arms MS. B. 19, fo. 25

b. Seal of the County Palatine of Lancaster under Henry VIII

c. Judicial Seal for Caernarvon, Merioneth, and Anglesey under Charles I (Brit. Mus. seal xxxvij. 73) ($\frac{3}{4}$)

d. Judicial seal for Brecknock, Radnor, and Glamorgan under James I (Brit. Mus. seal xliij. 10) ($\frac{3}{4}$)

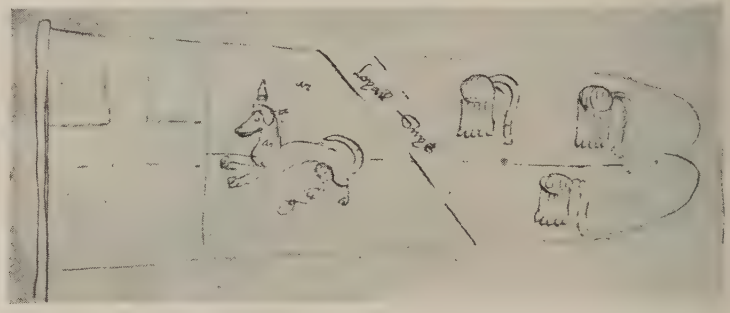


e. Standard of the Greyhound under Henry VIII, Add. MS. 45132, p. 120

a. Arms of Princess Margaret as Queen of James IV of Scotland, *Prince Arthur's Book*, p. 132

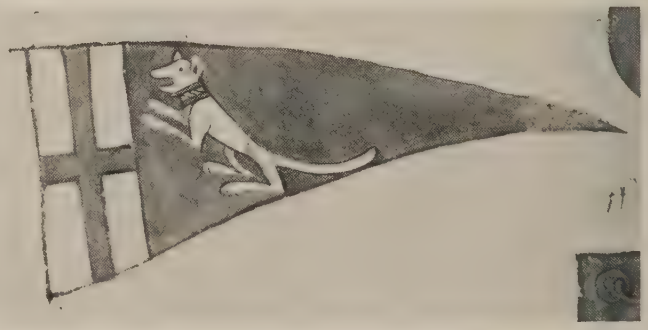
b. Arms of Princess Mary as Queen of Louis XII of France, *ibid.*

c. The greyhound and badge of Richmond, *ibid.*, p. 96



d. Standard of Sir Walter Devereux, Lord Ferrers, Add. MS. 45132, p. 84

e. Badge and supporters of Humphrey, duke of Gloucester, in Greenwich Old Church, from Nicholas Charles's Church Notes, Lans. MS. 874, fo. 113 *b*



f. A Harcourt pennon *c.* 1530, Vincent MS. 153, p. 208

a. Arms of Henry VIII and Anne Boleyn from the Choir screen, King's College Chapel, Cambridge

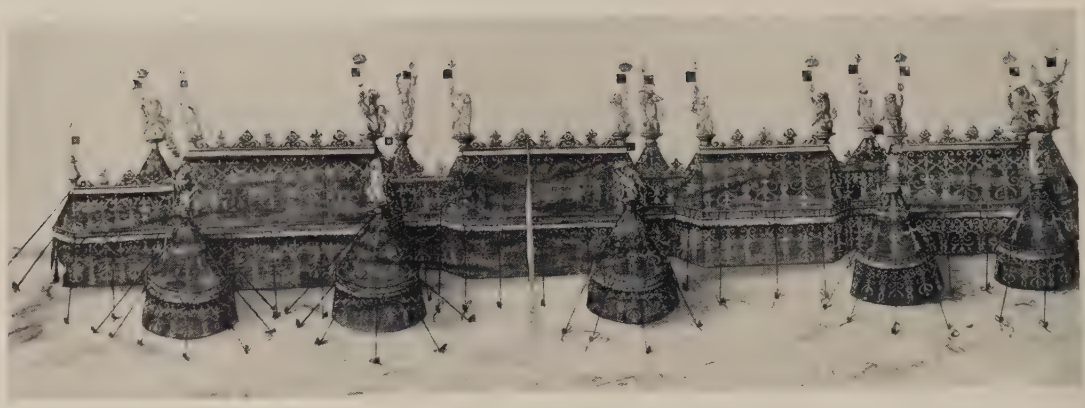
b. Seal of Arthur Plantagenet, Viscount Lisle, as Vice-Admiral of England, 1525 ($\frac{1}{1}$)

c. Greyhound of Sir John Beaufort, earl of Somerset. Roof-boss in the Warriors' Chapel, Canterbury Cathedral (*Photograph by C. J. P. Cave, F.S.A.*)

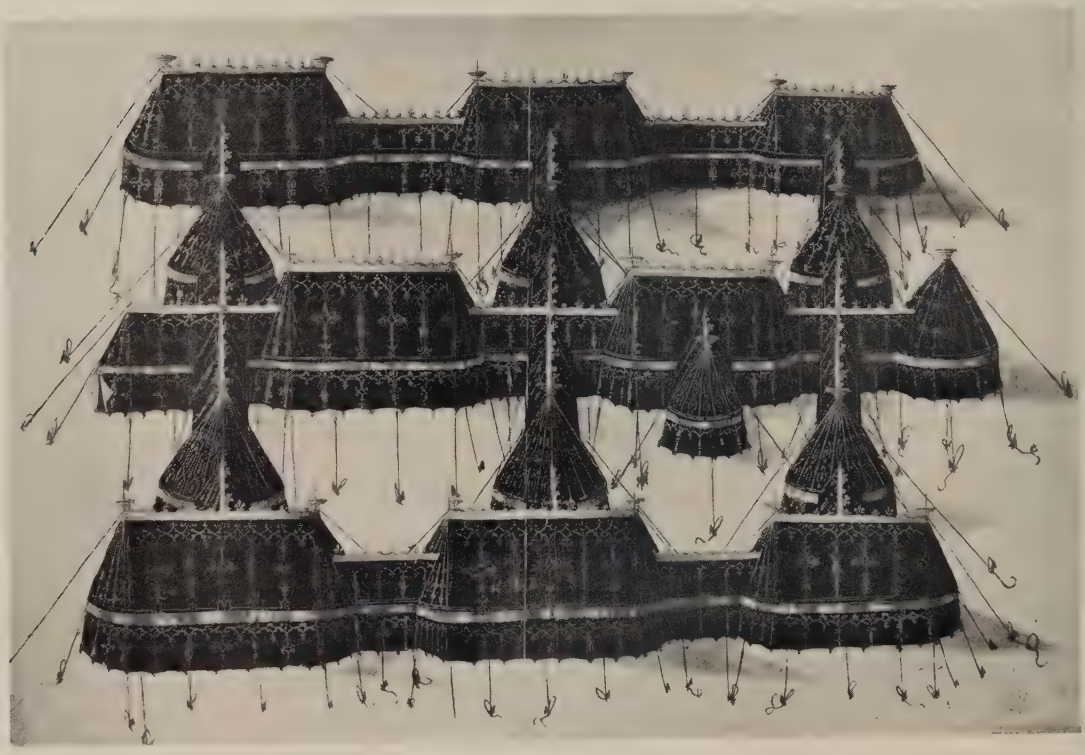
d. Seal of Sir Ralph Neville, 1388, Add. ch. 22538 ($\frac{1}{1}$)

e. Arms of Queen Mary I as Princess, *Prince Arthur's Book*, p. 72

f. Seal of Beatrice Stafford, Add. ch. 22391 ($\frac{1}{1}$)



a.



b.

c.

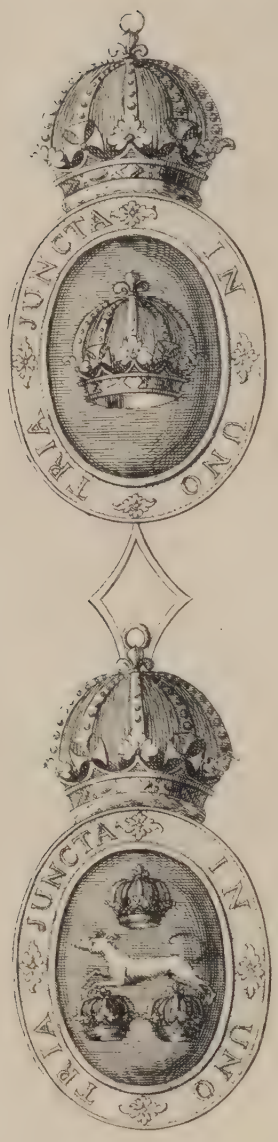
Royal pavilions temp. Henry VIII, Cotton MS. Augustus 3, nos. 18, 11, 19

a. The Bretigny seal of Edward III ($\frac{3}{4}$)

b. Seal of Sir Richard Wydevill, afterwards Lord Rivers ($\frac{1}{1}$)

c. Second Great Seal of Edward IV; Harl. ch. 43 E. 1 ($\frac{3}{4}$)

d. Seal of Elizabeth Wydevill as Queen of Edward IV ($\frac{1}{1}$)



The MESSENGER'S
Escutcheon.

a. Badge of the Messenger of the Order of the Bath, from John Pine's *Procession of the Order of the Bath*, 1730

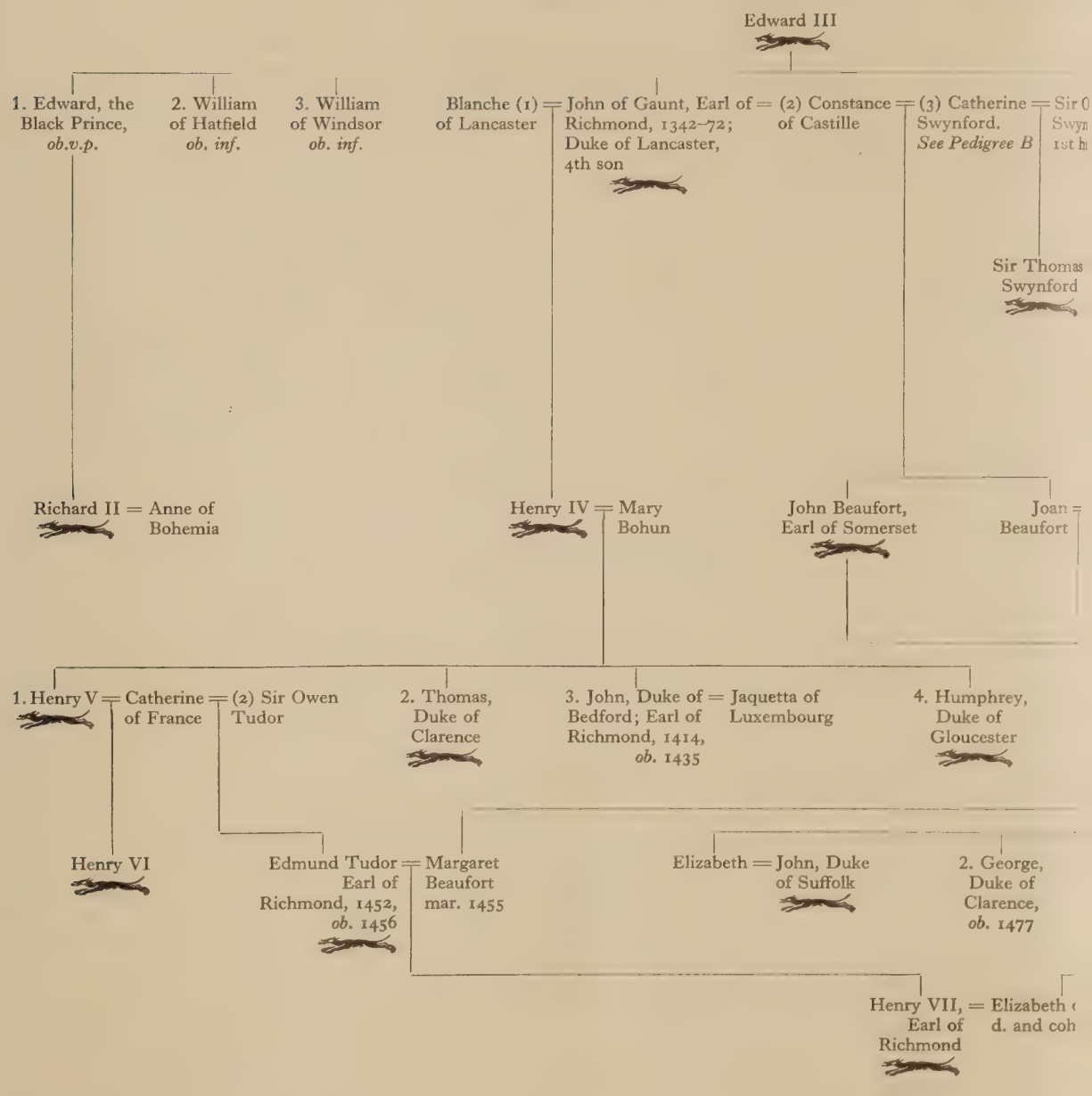
b. Badge of a King's Messenger under Edward VII

c. Badge of a King's Messenger under George II

PEDIGREE A

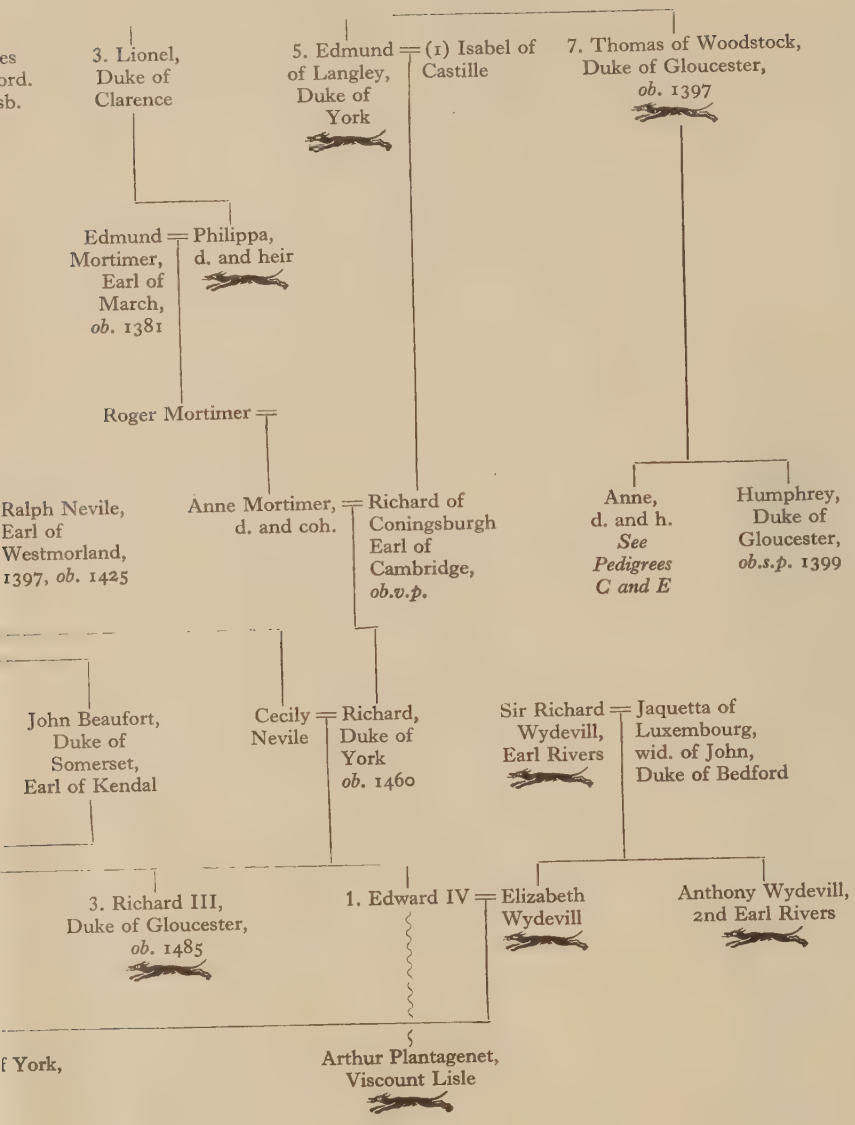
DESCENDANTS OF KING EDWARD III,

THOSE WHO USED A GREYHOUND

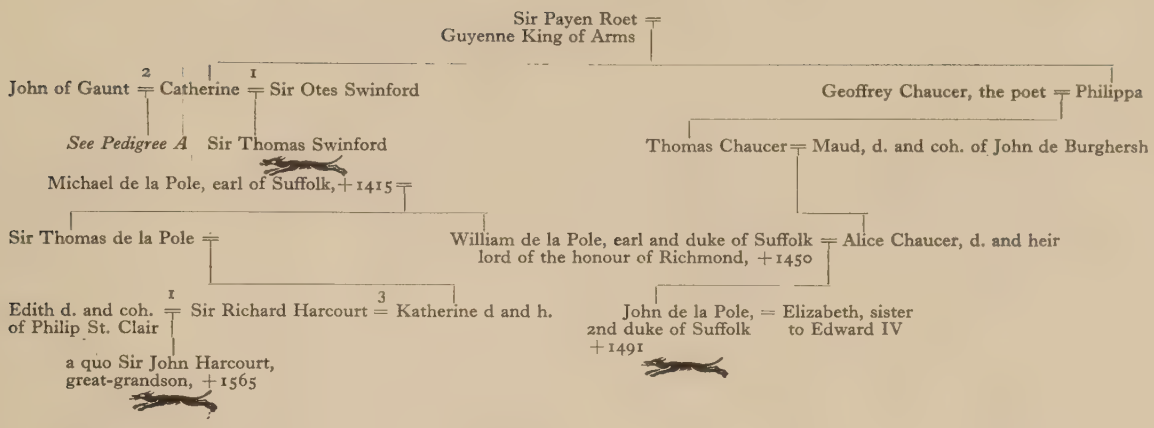


SHOWING BY A

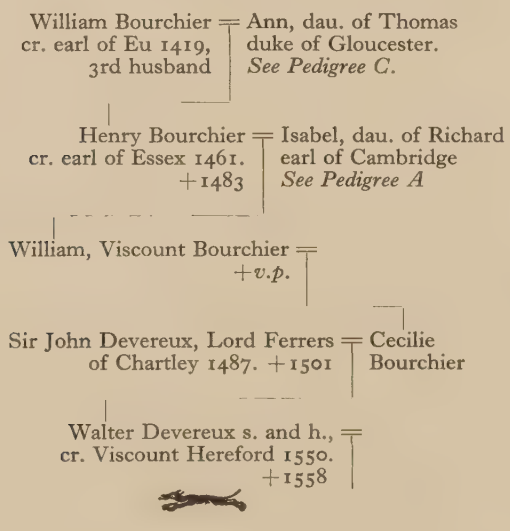
AS THEIR BEAST



PEDIGREE B

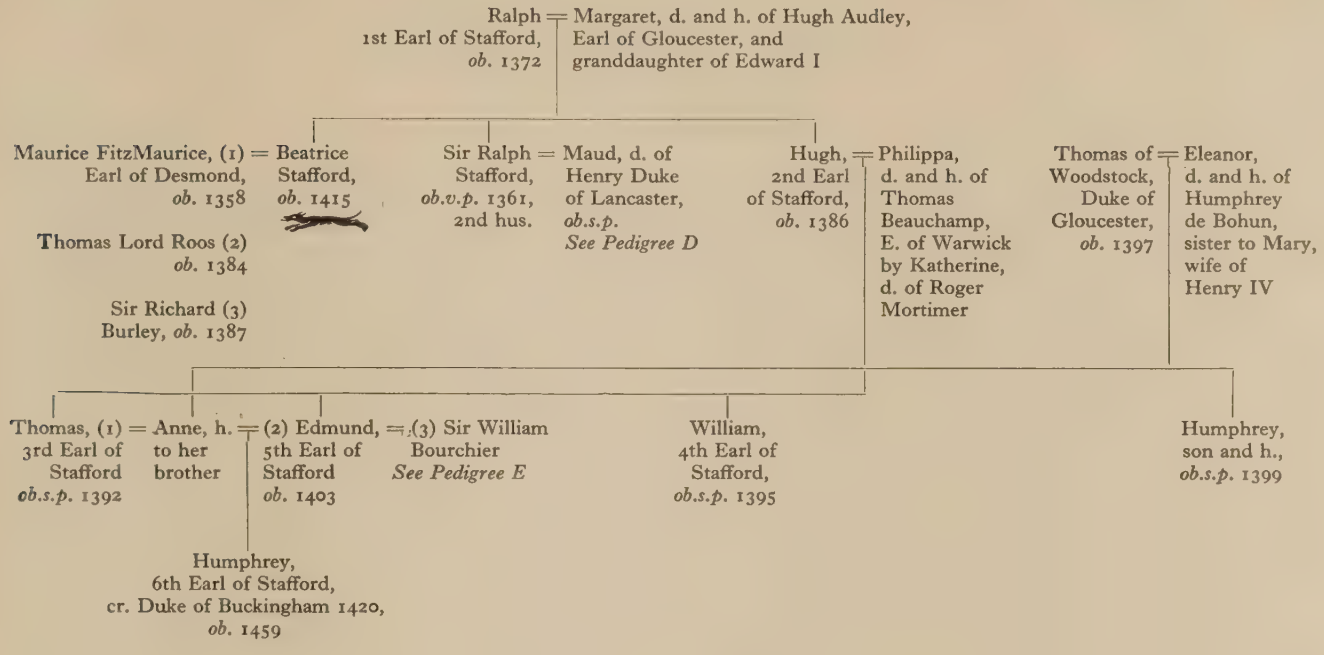


PEDIGREE E

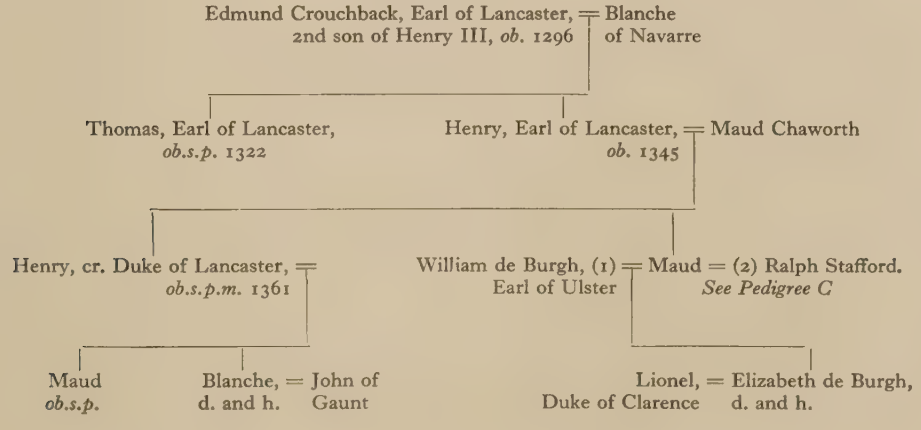


PEDIGREE C

BEATRICE STAFFORD'S CONNEXIONS WITH THE ROYAL HOUSE



PEDIGREE D



The Twelfth-Century Design Sources of the Worcester Cathedral Misericords

By MRS. TRENCHARD COX, F.S.A.

[*Read 3rd November 1955*]

MISERICORDS are a humble form of sculpture which has not attracted much attention from the erudite, either in the middle ages or today. Except when the seats of the choir stalls were tipped up, so that the misericords should spare their occupants the fatigue of standing through long services, these carvings were hidden and it does not seem to have been considered necessary that their subjects should conform to a consistent scheme of iconography. Lack of imagination, or of skill, might lead to a whole set of misericords being carved from a single decorative pattern as at North Marston (Bucks.), but where figure subjects were used it is very rare to find a consistent theme. The outstanding exception occurs at Ripple (Worcs.), where the misericords represent a complete set of 'Labours of the Months' presumably copied from the calendar decorations of some fine psalter. On most choir stalls we find a random selection of subjects, few of which are directly religious. Scenes from medieval romances, or subjects from the Bestiary; illustrations of sermon *exempla*, genre subjects, and meaningless grotesques form the major part of these designs, while a few carvings apparently express a literary or symbolical allusion which now evades interpretation. Too little attention has been paid to the problem of how these relatively uneducated craftsmen came to have such a wide range of subjects. Did they originate their own designs, or, if they did not, what models were given to them to copy? Unfortunately misericords are not often studied by those who have the wide knowledge of other fields of medieval art which is needed to identify some of the carvers' models, for the interchange of designs between artists working in different media was an accepted practice in the middle ages. It is the purpose of this paper to show that medieval woodcarvers did copy designs from other media and the identification of their models can sometimes yield evidence which is not available from other sources.

First of all it is necessary to establish the degree of accuracy with which a medieval carver could be expected to follow a two-dimensional design, and this can be done by comparing some late fifteenth- and early sixteenth-century misericords with the engravings from which they were certainly copied. In *Archaeologia*, lxxxv (1935) Dr. J. S. Purvis, F.S.A., showed that certain Old Testament scenes carved upon the misericords of Ripon Cathedral were copied from the block book *Biblia Pauperum* printed in the Netherlands in the late fifteenth century, and suggested that other misericords, in Manchester Cathedral and Henry VII's Chapel, Westminster, were also inspired by early engravings. To these examples I would add three of the misericords

in Bristol Cathedral which are definitely copied from the ornamental borders of books printed in Paris *c.* 1500, by Simon Vostre, Pigouchet, or Thielman Kerver, all of whom used the same designs. These same borders also furnished the designs for the decoration of the De La Warr Chantry Chapel at Boxgrove (Sussex). A single spread from a Book of Hours printed by Thielman Kerver in 1507 (pl. L, *a*) shows two of the subjects represented on the Bristol misericords and comparison between the engravings and the carvings shows that, although the carver might omit background details, which would have overloaded a sculptural design, he kept close enough to the main lines of his model to make its identification certain. Thus the foliate background to the three figures fleeing from a two-headed dragon has been suppressed by the Bristol woodcarver (pl. L, *b*), although the stonecarver at Boxgrove retained it. The engraver showed the last figure glancing back over his shoulder, but this pose baffled the carver who has made anatomical nonsense of this figure by showing the head almost in full face while the body is seen from the back. We shall find the same preference for a frontal position modifying the original design on the Worcester misericords.

The second grotesque at Bristol (pl. L, *c*) shows an ape mounted upon a monster which is being driven by a man on foot who belabours it with a club and also twists its tail. The carver has reversed this design, not simply by turning over a flat pattern, which might have been due to a reverse printing, but by moving the creatures round in space as though they were concrete beings. Thus, he has shown the *top* of the sack on which the ape is sitting hanging down the monster's flank, and not the bottom of it as in the engraving. Although trivial in itself this point may help us to understand the way in which the carvers of misericords regarded a two-dimensional design, making use of its general composition and symbolical details but feeling free to alter the dress, and even the attitudes, of the figures to suit their own requirements.

The invention of printing probably made the practice of carving from a drawn design more common, as well as increasing the chances that both copy and model would survive, for such close comparisons can rarely be made in the earlier periods. On this account alone, therefore, the choir stalls of Worcester Cathedral are worthy of careful study, particularly the ten misericords which represent Old Testament subjects, a variety unparalleled on any other stalls in England. Some of these represent such rare types that they have often been misidentified as their corresponding Gospel anti-types. The subjects shown are: the Fall of Man, the Expulsion, and, perhaps, Adam and Eve labouring after the Fall; three scenes from the life of Isaac, his circumcision, bearing of the faggots, and arrested sacrifice; Moses and the Brazen Serpent, Samuel being presented in the Temple, Samson and the Lion, and the Judgement of Solomon.

The first two scenes from the life of Isaac, the Brazen Serpent, and the Presentation of Samuel are all so rarely found as isolated subjects in fourteenth-century church decoration that it seems most probable that the carver copied them from some earlier series of typological designs, such as the twelfth-century wall-paintings which are known to have existed in the Chapter House at Worcester. The next point to be determined is therefore whether the carver could have seen these paintings. There is

no record of how long they survived but Dr. M. R. James suggested that they were probably painted upon the upper part of the walls and were destroyed when large Perpendicular windows were inserted *c.* 1400.[1] Another suggestion put forward by Canon Wilson[2] was that the painted roundels decorated the vaulting surfaces, in which case they might have lasted longer. Serious outbreaks of fire damaged the cathedral and monastic buildings in 1189[3] and in 1202[4] but since the Norman Chapter House still stands, its fabric cannot have been seriously affected and it seems probable that the paintings were still visible when the new choir stalls were made in 1379. The later history of the misericords has been troublous. The stalls were moved from their original position under the tower in 1551 and placed in their present position in 1556. In the early nineteenth century they were again taken down and the misericords used as part of a cornice for a new organ screen and covered with whitewash. In 1865 they were recovered from this unsuitable position, restored, and fitted into the back row of the choir stalls. In spite of these vicissitudes the carvings remain in surprisingly good condition although some of them have had to be reset in new seats.[5]

Since these typological misericords could have been copied from the wall-paintings, their iconography must clearly be studied in connexion with such records as we have of what the Worcester paintings looked like, and of their relation to two other great series of typological decorations at Peterborough and Canterbury. No traces of the actual paintings at Worcester have survived but their subjects are known from a set of Latin verses written in the late twelfth, or early thirteenth, century upon the last page of a manuscript in the Cathedral Library (fo. 81), which is entitled *Ieronimus super Psalterium et in fine quidam versus super biblia*. Dr. M. R. James, who published these verses in 1900[6] considered that they were certainly related to the paintings in the Worcester Chapter House, for their general title: *Versus capituli*, implies that they refer to some Chapter House and the manuscript seems to be of Worcester provenance. Moreover the arrangement of the verses into ten groups of subjects, each group consisting of three Old Testament types with their Gospel anti-type, corresponds to the unusual plan of the Worcester Chapter House which has ten bays. The first eighteen lines are headed *In circuitu domus* and describe the general theme: what the Law had foreshadowed under a veil of symbolism has now been interpreted by Grace and the painter has set forth what the Law or the prophets had signified concerning Christ or the Virgin. Dr. James suggested that these introductory lines may have been painted on a band of stone running round the Chapter House, but, alternatively, they may have been written in large characters upon a scroll and hung up to explain the paintings round the Chapter House, in the same way that a fourteenth-century scroll preserved in the Cathedral Library at Canterbury (C. 246) was probably used to explain the twelve typological windows which were originally in the choir aisles.[7]

[1] M. R. James, 'On Two Series of Paintings formerly at Worcester Priory', *Cambridge Antiq. Soc. Proc.* x, 1900.

[2] Canon Wilson, 'On Some 12th century Paintings in the Vaulted Roof of the Chapter House at Worcester', *Ass. Arch. Soc. Reports and Papers*, xxxii, 132 ff.

[3] *Annales Monastici*, Rolls Series, iv, 386.

[4] *Ibid.* 391.

[5] Canon Southwell, 'Notes on the Misericords in Worcester Cathedral', *Ass. Arch. Soc. Reports and Papers*, xxxiv, 127. Also unpublished notes on the misericords by C. B. Shuttleworth in the Cathedral Library.

[6] *Loc. cit.*

[7] M. R. James, 'On Twelve Windows formerly in the Choir of Canterbury Cathedral', *Cambridge Antiq. Soc. Octavo Publ.* no. 38, 1901.

There is nothing in the Worcester verses to indicate what the paintings looked like, but the same verses occur on some pages of decorative designs which are bound up with a thirteenth-century manuscript of the Apocalypse in the Library of Eton College (MS. no. 177) (pl. LI). In twenty-five out of forty cases the lines are identical and the unusual association of three Old Testament types with each Gospel anti-type, instead of two, as at Peterborough and Canterbury, strengthens the probability that these designs record the appearance of the paintings in the Worcester Chapter House. The only divergence in subject between the two series is that the Circumcision of Isaac is replaced at Eton by the alternative type of Zipporah circumcising her son. This change is of peculiar interest in connexion with the misericords at Worcester.

It is known that wall-paintings were sometimes copied by those who illuminated fine manuscripts. In a thirteenth-century Psalter, of Peterborough provenance, now in the Royal Library at Brussels[1] (MS. 9961) there are about a hundred pictures of Old and New Testament subjects which are generally accepted as being copied from the lost wall-paintings executed at Peterborough in the time of Abbot William of Waterville, 1155–77. Not only do these pictures agree with Gunton's seventeenth-century account of the paintings and inscriptions which survived to his day in the choir of the abbey church,[2] but there are mistakes in the arrangement of types and anti-types of which Dr. James wrote: 'such an arrangement would never have been made by the original designer of the series while it would very likely occur from a somewhat servile process of copying.'[3] Although such pictures were probably not scrupulously accurate copies of the wall-paintings these two manuscripts, at Brussels and Eton, may therefore be considered as evidence of what the general designs of the Peterborough and Worcester typological paintings were like.

The Peterborough paintings were one of the earliest of the great twelfth-century series of typological decorations and their choice and arrangement of subjects must naturally have been of keen interest to the other great Benedictine houses. The verses written upon the scroll in the library of Canterbury Cathedral show that the iconography of the typological windows in the choir aisles was closely associated with the Peterborough cycle and it is thought that Benedict, Prior of Canterbury, who succeeded William of Waterville as Abbot of Peterborough in 1177, may have sent back to Canterbury descriptions of these paintings to guide the designer of the new windows.

If such a cycle of verses as that contained in the Canterbury scroll or the Worcester manuscript had been used exclusively in the community where it was composed, the problem of deciding the provenance of works of art on which these verses appear would have been much simpler than is actually the case. Copies of the Canterbury verses are recorded in several medieval libraries[4] and an example surviving in the

[1] J. Van den Gheyn, *Le Psaultier de Peterborough*, Brussels, 1905, facsimile edition.

[2] S. Gunton, *The History of the Church of Peterborough*, 1686, p. 95.

[3] M. R. James, 'On Paintings formerly in the Choir at Peterborough', *Cambridge Antiq. Soc. Proc.* ix, 1895–6, pp. 178 ff.

[4] M. R. James, 'On Twelve Windows formerly in the Choir of Canterbury Cathedral', *Cambridge Antiq. Soc. Octavo Publ.* no. 38.

library of Corpus Christi College, Oxford (MS. C. 256) has kept the heading, definitely referring to the windows, which has been lost by the Canterbury copy: *Fenestrae in superiori parte ecclesiae Christi Cant. incipientes a parte septentrionali.*[1] The Worcester verses also seem to have been known elsewhere, for a manuscript in the College of Arms (Arundel xxx) records that inscriptions agreeing with these verses were associated with eight roundels at the altar of the Virgin in the Abbey church of Bury St. Edmunds. The scribe does not specify the medium in which these roundels were executed.[2] Although the question cannot be proved, the inclusion of such rare subjects as the Unveiling of the Synagogue and Christ crowning the Church while Peace and Justice embrace one another, in a short series of eight subjects, points rather to the monks of Bury having borrowed a few subjects from the fuller cycle at Worcester than the other way round. The Worcester verses also appear on three twelfth-century enamelled ciboria: the Warwick Ciborium, in the Victoria and Albert Museum; the Balfour Ciborium, on loan to that Museum, and the Malmesbury Ciborium in the Pierpont Morgan Library, New York, but, because these verses are known to have been used in different places, this fact has not been accepted as proof of a Worcester provenance.

We cannot tell whether any copies of such verses were accompanied by sketches of the paintings, but it is well known that careful instructions, sometimes supplemented by small sketches, were prepared for the artists who copied illuminated manuscripts, for careless copyists sometimes incorporated such instructions into the new text. A manuscript in the British Museum (Egerton 3323) contains a twelfth-century description of the pictures in two illuminated Psalters, and of the verses that accompanied them, which might have been intended to direct future illuminators as well as to record these two elaborately decorated books.[3] Some such directions, illustrated with sketches, could easily have been sent both to Canterbury and Worcester to aid the designers of the new typological decorations. There is also the possibility that the Peterborough painter went on to Worcester, for there is no record of the exact date at which the Worcester paintings were executed, except that they must have been in existence when the late twelfth-century copy of the verses was written. In both cases the iconographical scheme was slightly altered. At Canterbury the cycle was enriched by the magnificent illustrations of Our Lord's parables, and at Worcester the Creation scenes were omitted and a subject connected with the Circumcision of Christ was added. The Canterbury verses agree in many cases with those used at Peterborough, but new verses were apparently composed at Worcester and these do not explain some of the symbolical details used by the designer of the pictures.

Such an omission, strongly suggesting the use of borrowed designs, is illustrated by the misericord representing the Presentation of Samuel at Shiloh (pl. LII, *c*). The Worcester verses make no reference to the large jug which is so prominently displayed by the woman, but in the Peterborough Psalter (pl. LII, *a*) Hannah is shown bearing in her arms the amphora of wine which, with the oxen and the measures of flour

[1] B. Rackham, *Ancient glass of Canterbury Cathedral*, 1949, p. 52.

[2] M. R. James, 'The Abbey of St. Edmund at Bury', *Cambridge Antiq. Soc. Octavo Publ.* no. 28, 1895.

[3] Francis Wormald, 'A Medieval Description of Two Illuminated Psalters', *Scriptorium*, vi, 1952, p. 18 ff.

(also shown), formed her offering. Above this picture is the verse which also accompanied the more elaborate rendering that still survives in the Canterbury glass:

Significat Dominum Samuel puer, amphora vinum

The Worcester carver was evidently working from a design which laid special emphasis upon the symbolism of the amphora, and the probability that this design originated at Peterborough is strengthened by the way in which the corresponding picture in the Peterborough Psalter explains two other curious features of the misericord. The architectural feature which divides the two decorative arches in the background of the picture becomes the elaborately carved, but apparently meaningless, corbel above the altar on the misericord, and the way in which the High Priest takes the child's outstretched hands explains Samuel's strange pose in the carving. The carver perhaps confused Elkanah with the High Priest, for he has shown him wearing some kind of mitre, and perhaps omitted the High Priest's figure from lack of space. But the same omission occurs in the Eton manuscript (pl. LII, *b*), leaving an unbalanced blank strangely at variance with the clever way in which the other designs completely fill their roundels. It is tempting to speculate whether this subject in the Chapter House paintings, which would probably have been on the side nearest the abbey church, was partly obliterated by fire damage.

The influence of the Peterborough paintings upon those at Worcester is also suggested by the misericord showing Abraham and Isaac on their way to the appointed place of sacrifice (pl. LIII, *c*). The markedly diagonal crossing of the faggots borne by Isaac, which stresses the typological association with Christ bearing His Cross, and the curious way in which Isaac holds them, like two guns, are the most immediately striking resemblances between the misericord and the picture in the Peterborough Psalter (pl. LIII, *b*), but a more significant detail is the form of lamp which Abraham carries in his left hand. This has a short pointed stem crowned by a decorated cup from which rise the flames and appears to represent a form of lamp in common use at the end of the twelfth century. When not carried these lamps were designed to be suspended in a circular fitting and another such lamp is shown, hung thus over the altar, on the misericord of the Presentation of Samuel[1] (pl. LII, *c*). Not only is the subject of Isaac bearing the faggots rare at any period of English church decoration, but its rendering with these symbolical and practical details, foreign to the normal repertoire of a fourteenth-century woodcarver, indicates clearly that the maker of this misericord must have been copying an older design, although he altered the pose and dress of the figures.

It was the marked crossing of the faggots which caught my attention on the Warwick Ciborium (pl. LIII, *a*), but although the subject of Isaac bearing the faggots is shown

[1] E. M. Jope, H. M. Jope, and S. E. Rigold, 'Pottery from a late 12th century Well-filling and other Medieval Finds from St. John's College, Oxford. 1947', *Oxoniensia*, XV, 1952. The authors write that, 'Early in the Middle Ages pointed lamps were in use for suspension. This type appears to have gone out of use, however, by about the later 12th century, though later examples can be found in Scotland, for instance.'

A pottery lamp of this funnel-shaped form, found in an ash-pit in Nicholas Lane, London, is now in the London Museum (A. 25740). It is there ascribed to the thirteenth century and the *Medieval Catalogue* quotes the possible representation of such lamps on a shield in Prior Chillendon's Cloister at Canterbury as evidence of the continued use of the form in the fifteenth century.

here, and also upon the Balfour Ciborium, in a design strikingly like that of the Worcester misericord, differences of pose, and the fact that the lamp has here been changed into a long torch, would have made this resemblance indecisive had it not been for the much more remarkable correspondence between the two ciboria (pl. LIV, *a*) and the misericord (pl. LIV, *c*) in the subject of the Circumcision of Isaac. In this case the design, which is repeated in the Eton manuscript (pl. LIV, *b*), has such unusual details that their recurrence is strong evidence of direct connexion.

In each case the mother stands on the left of the altar holding the child in a more or less upright position with its right foot resting upon the altar and the left leg raised, while it twists its head round in a strained position to take her breast. On the misericord this curious pose is awkwardly, but unmistakably, repeated, but the most interesting feature of the carving is that the High Priest, holding the knife, is here represented with horns projecting from his forehead, showing that he is meant to be Moses. Inscriptions on the ciboria definitely identify the subject as the Circumcision of Isaac but although the design appears unchanged in the Eton manuscript (pl. LIV, *b*) a reference to *Exodus iv* is written in the margin, and this chapter contains the story of Zipporah circumcising her son in the presence of Moses. Neither in the manuscript, nor on the misericord, is the woman shown holding the knife, or sharp flint, and Zipporah is not mentioned in the Worcester verses. Perhaps therefore the note on the Eton manuscript may only indicate that the story of Zipporah (an alternative type for the Circumcision of Christ) was to be substituted in later copies, and that the misericord was carved from some later version in which the design had been altered to include Moses without being made scripturally correct.

The Bible gives no indication that either Sara or Zipporah suckled their sons at their circumcision and the introduction of this motif, unless it was intended merely to identify the woman as the child's mother, is probably an allusion to some legend or to the writings of an early commentator. The series of twelfth-century paintings which surrounded the choir of the abbey church at Bury St. Edmunds included one representing 'Sarah gives suck to Isaac, Abraham's joy'.[1] As the Circumcision of Isaac was not shown at Bury the Worcester painter may have been attempting to combine two subjects. I have failed to find any convincing literary source for this subject, but it is perhaps worth noting that in the *Sermo in Circumcisione Domini* of St. Augustine[2] an allusion to the suckling of the Christ Child occurs in the same sentence as a reference to the Presentation in the Temple, although with no suggestion that it took place there. The thirteenth-century *Meditationes Vitae Christi* contains a charming description of how the Virgin Mary suckled the Christ Child at His circumcision to comfort Him 'for the sorrow that he felt there through His flesh, for without doubt He had very flesh and kindly sufferable as have other children'. It may have been to stress this fact that the Virgin is shown thus suckling the Child on a roof boss at Salle, Norfolk, and in the glass of St. Peter Mancroft, Norwich, but the earlier application of this motif to the Old Testament types remains mysterious.

[1] The subjects of this series of illustrations of the Book of Genesis (probably that executed in the time when Sampson was sub-sacrist, before 1182) are recorded in the manuscript in the College of Arms (Arundel xxx).

[2] *Patrologia Latina*, xlvii, col. 1136.

The misericord showing the sacrifice of Isaac (pl. LV, *a*) shows a clear likeness to the medallion on the Warwick Ciborium (pl. LV, *b*), Isaac kneels on a small square altar, instead of upon the faggots, and Abraham seizes him by the forelock. These features also occur in the Eton manuscript (pl. LI) which, like the misericord, shows the altar covered by a falling cloth, but they are not rare enough to be distinctive and there are differences in the pose of Abraham's arm and in the symbols used to represent the voice of God. On the misericord, as on the Warwick Ciborium, a hand emerges from conventionalized cloud (the carver seems to have been unsure of whether it was cloud or foliage) to seize the blade of the sword, while on the Balfour Ciborium and in the Eton manuscript an angel is shown.

The misericord shown on pl. LV, *d* has sometimes been identified as the Worship of the Golden Calf, but its correct interpretation is made clear by the verse which accompanied the subject of Moses lifting up the Brazen Serpent in the Canterbury windows: *Serpens eneus elevatur in columpna*. This title, which does not occur in the Worcester verses, explains the architectural column supporting the strange little dragon, and the coiled serpents with protruded tongues which are vividly represented upon the supporters of the misericord clearly refer to the fiery serpents which plagued the Israelites until these were healed by the sight of the Brazen Serpent lifted high, upon 'a pole' according to the Authorized translation, or *pro signo* in the Vulgate. The Worcester title reads: *Serpens serpentum Christus necat ignipotentum* but the roundel in the Eton manuscript (pl. LI) gives no indication that the serpents were represented in the wall-paintings. In the Peterborough Psalter they are shown biting the bare legs of the Israelites. The use of a column in this subject seems to have been popular with artists in enamel on both sides of the Channel. It occurs on the Malmesbury Ciborium and on many Mosan enamels, but usually with a realistic serpent shown coiled in profile on the top of the capital. The Peterborough Psalter and the Eton manuscript show the serpent coiling upwards round a slender shaft with only its somewhat wolf-like head appearing over the capital, and, in both cases, as on the misericord, the 'serpent' has wings.

The misericords illustrating the Fall of Man and the Expulsion (pl. LV, *c*) might have been executed by any fourteenth-century carver without the help of older designs and the subjects are not included in the Worcester verses. They do appear, however, in the Eton manuscript, although without surrounding titles, and were included among the Peterborough paintings. The carvings are more like the pictures in the Peterborough Psalter than those in the Eton manuscript but they lack any unusual details which would make such resemblance decisive. The misericord showing a man holding a spade and a woman spinning (pl. LVI, *b*) obviously alludes to the labours of Adam and Eve after the Expulsion, but the general design differs from that shown in the Eton manuscript and seems more akin to the series of carvings of the Labours of the Months (pl. LVI, *c*, *d*) which were probably copied from the calendar illuminations of some Psalter as yet unidentified.

The carving of Samson and the Lion (pl. LV, *e*) has no marked likeness to the renderings of this subject in the Eton manuscript or on the ciboria; it was too familiar a theme for the carver to need the guidance of a drawn design. The misericord of the

Judgement of Solomon (pl. LV, *f*) has a negative interest, for the subject is not mentioned in the Worcester verses nor illustrated in the Eton manuscript. The carving is also so entirely different in style that it must have been copied from a different source. The crowded design and the elaborate canopy which merges the supporters with the central subject suggest a later medieval composition.

One more misericord must be considered in relation to the Eton manuscript although it does not represent an obviously typological subject (pl. LVI, *a*). The carver has shown two men in long robes standing side by side, both holding scrolls in their hands and one of them apparently pointing upwards. In the decorative compositions of the Eton manuscript (pl. LI) the arrangement of three Old Testament types round their Gospel anti-type is made symmetrical by the addition of a fourth roundel showing two prophets holding scrolls or pointing towards the central roundel which illustrates the fulfilment of their prophecies. The attitudes of these prophets vary from page to page and in no case do they exactly correspond with those of the figures on the misericord, but there can be little doubt that the carver found this design where he had already found many others.

Two further misericords may be considered as being almost certainly copied from early manuscripts although their original designs remain unidentified. The first of these (pl. LVII, *b*) shows a subject unique in the iconography of British churches: a hooded woman, writing at a high desk, and either feeding a large bird which stands beside her, or else taking some small object from its beak. The head of a snake, or a small dog, emerges from her loose sleeve and seizes a smaller bird by the neck. Professor Wormald suggested to me that this represents Dialectica, for, in the *De Nuptiis Philologiae et Mercurii et de Septem Artibus liberalis* by Martianus Capella (fifth century), she is described as holding a serpent in her left hand, half-hidden by her robe. A tenth-century manuscript in the Bibliothèque Nationale, Paris (MS. lat. 7900A, fo. 132^{v}), shows Dialectica with two snakes coiling out of her sleeve. The creature at Worcester is, however, more like a small dog with a collar round its neck, and I am indebted to Dr. Ettlinger of the Warburg Institute for pointing out the close parallel found in one of the diagrams of the *Hortus Deliciarum* of Herrade von Landsberg (pl. LVII, *a*). Here a central figure of Philosophia, enthroned, is surrounded by seven radiating arches in each of which stands one of the Seven Liberal Arts. Dialectica makes a gesture of speech with one hand while in the other she holds the head of a snarling dog. The nature of this head is made clear by the words: *caput canis* written nearby. Round the arch is written: *Argumenta sino concurrere more canino.* The dog-headed snake is also associated with Dialectica in a late eleventh-century poem in the Bibliothèque Nationale, Paris (MS. lat. 3110).

The birds are more difficult to explain. In an eleventh-century miniature in a tenth-century Boethius (Paris, Bibliothèque Nationale, MS. lat. 6401) Dialectica is shown in a mandorla surrounded by men at arms who aim their spears at her, and by large birds of uncertain meaning. Dr. Heydenreich, in an article on 'Dialektik' in the *Reallexicon zur Deutschen Kunstgeschichte*, suggests that these birds represent evil thoughts for, at the bottom of the diagram of the Liberal Arts in the *Hortus Deliciarum*, are four

[1] A. Straub and G. Keller, *Hortus Deliciarum*, Strasbourg, 1901 repr.

seated poets, or sages, with small birds hovering by their ears and the words: *immundis inspirati spiritibus* written between them. This interpretation does not, however, suit the apparently friendly relations of the Worcester Dialectica with her large bird, and the only parallel I know which does appear to explain this occurs on a twelfth-century engraved bronze bowl, found in Westphalia and now in the possession of the Society of Antiquaries of Münster. The engraved design on this bowl shows a central group of Philosophia between Socrates and Plato, surrounded by a radiating arcade enclosing the figures of six wise men of classical antiquity. Beside each of these sages is a smaller figure of one of the Liberal Arts and each Art is associated with a named bird. Since the nightingale accompanies Musica it was clearly the designer's intention that these birds should be appropriate to the Arts with which they were associated. The acquisitive magpie and eloquent blackbird are understandably associated with Arithmetic and Rhetoric respectively, but it is harder to understand why Grammar should have a hen and Geometry an eagle! Unfortunately Dialectica's bird cannot be definitely identified; the name appears to be MONERUS. The design of the bowl has no relation to that of the misericord so this iconographical link would be of small importance if it were not for the fact that this bowl appears to be closely related to two English twelfth-century engraved bronze bowls in the British Museum, known from their subject-matter as the Cadmus and Scylla Bowls, and that both of these were found in the Severn between Tewkesbury and Gloucester.[1] Such engraved bowls were widely distributed in the twelfth century over northern Europe, so that the place where they are found is not necessarily evidence of where they were made, but, if the misericord indicates that designers in the workshops of Worcester Priory were inclined to associate Dialectica with a bird attribute, and we remember that Baldwin, who was Bishop of Worcester between 1180 and 1190, is recorded as having written a book on mythology, then the discovery of two bowls with rare mythological subjects in the Severn below Worcester surely suggests that these might have been accidently frustrated exports from the Priory workshops, while that at Münster reached its destination.

The misericord showing a basilisk (pl. LVI, *f*) has certain features which distinguish it from other representations of this monster. The most important of these is the inclusion in the design of small animals holding foliage in their mouths. These must be the weasels which, alone among animals, can attack the basilisk with impunity because they first eat rue. The other point is that this basilisk has heavily fringed shanks with curious tri-lobed hooves, whereas a well-bred basilisk should have birds' feet. This characteristic occurs in several of the animals shown in the fourteenth-century Peterborough Bestiary (Corpus Christi Coll., Cambridge MS. 53) although it is not there applied to the basilisk.

Another misericord, showing a naked woman, wrapped in a net, and riding a goat (pl. LVI, *e*), may be accepted as almost certainly copied from the marginal ornaments of some manuscript. A similar, although not identical, figure is shown in the Ormesby Psalter.

Until the sources of these carvings are discovered the misericords themselves can

[1] O. M. Dalton, 'On Two Medieval Bronze Bowls', *Arch.* lxxii, 132 ff.

teach us no more, but the iconographical association of the Eton manuscript with the three enamelled ciboria which they led me to study also throws an interesting light upon the provenance of two remarkable examples of late twelfth-century stone sculpture: the fonts of Southrop, Gloucestershire, and Stanton Fitzwarren, Wiltshire.

The Worcester verses associated with the Crucifixion include lines headed: *Verba Christi ad Ecclesiam* which suggest that the wall-painting, like the roundel in the Eton manuscript (pl. LI), showed a personification of the Church standing beneath the Cross. There is nothing in these lines:

Ut regnes mecum, felix homo, dormio tecum;
Nil tibi prodesset natus nisi mortuus esset

to indicate what the opposing figure may have been, but in the miniature this is a six-winged cherub sheathing a large sword. This use of the Angel of the Expulsion as a symbol of Man's redemption from the Doom of the Fall is so rare that, in his catalogue of the Eton manuscripts, Dr. M. R. James thought it worth noting that it occurs in the thirteenth-century glass of Sens Cathedral. M. Emile Mâle also quotes an example in Rouen glass.[1] It is therefore interesting to find the figures of Ecclesia holding a chalice and the six-winged cherub sheathing its sword side by side upon the Norman font of Stanton Fitzwarren (pl. LVIII, *c*) while on the closely related font at Southrop the cherub is replaced by the much more usual partner of Ecclesia, Synagogue. On the Stanton Fitzwarren font, but not at Southrop,[2] Ecclesia tramples upon a dragon and the words SERPEN(S) OCCIDITUR are incised on the background of the niche. The Eton manuscript shows a green serpentine form at the base of the Cross; this has no head but might easily have been produced by careless copying of an unfamiliar motif in the original design. The surrounding title does not refer to the serpent, but the Worcester verses, from which the manuscript here makes one of its rare divergences, read thus:

Hostia solennis, via regni, vita perhennis
In cruce mactatur, PERIT ANGUIS, ovis revocatur.

A *live* serpent coiling up the base of the Cross is not uncommon in early iconography, but this *dead* serpent seems to be a second iconographical peculiarity linking the font with the Eton manuscript.

That both these fonts were made in the workshops of some important monastery has often been suggested, for their craftsmanship is of fine quality and the figures of Virtues overcoming Vices which occupy the remaining niches round their tub-shaped bowls suggest the guidance of a literate designer, and probably a drawn design. Evidence supporting this conjecture can be found on an enamelled casket in the Cathedral Treasury at Troyes (pl. LVII, *c*) which has been associated, on stylistic grounds, with the three English ciboria. This casket, like the fonts, shows each pair of figures within a separate arch. Dr. A. Katzenellenbogen in his study of *The Allegories of the Virtues and Vices in Medieval Art*, 1939, p. 21, writes of the Troyes casket: 'with rarely paralleled violence' the Virtues seize their victims by the hair or

[1] Emile Mâle, *L'art religieux du xiii^e siècle en France*, pp. 224–5 repr.

[2] Reproduced in G. Zarnecki, *Later English Romanesque Sculpture*, 1953, pl. 98.

legs, to stab them to death or flog them. If we allow for the more formal idiom of stone-carving, and the narrower niches, we can see something of these rare characteristics on the fonts. The point at which each Virtue aims her lethal thrust seems to have been determined by symbolism in the original design (although the craftsmen were inconsistent as to its application) but this does not always agree with the actions described by Prudentius in the poem of the *Psychomachia*. For instance, Prudentius writes of *Sobrietas* displaying the banner of the Cross before engaging *Luxuria* whom she dispatches with a stone. On both fonts (pl. LVIII, *b*) a corresponding Virtue has a multiple-tailed pennon attached to the spear, which she drives into the eye of the fallen Vice. On the casket it is *Largitas* who drives a spear into the eye of *Avaritia*. Other Virtues, on both fonts and on the casket, drive their weapons into the mouth, the throat, or the back, of their opponents.

Agreement in error is always more significant than similarities in correct rendering, and the scourging Virtue which is dramatically portrayed on the Troyes casket (pl. LVII, *c*) and on the Southrop font (pl. LVIII, *a*) is therefore the most important link between the two. At Southrop the scourge is most unsuitably wielded by *Patientia* and at Troyes by *Parsimonia* but in neither case could the craftsman claim the authority of Prudentius, for the only whip mentioned in the *Psychomachia* is the serpent-scourge which *Discordia* lets fall upon the battlefield before disguising herself as a Virtue. None of the numerous illustrations in R. Stettiner, *Die illustrierten Prudentius Handschriften*, 1905, shows a Virtue scourging a Vice (although *Superbia* has a whip to urge on her horse in Add. MS. 24199) but in some cases the long flames which issue from the torch with which *Libido* seeks to scorch the eyes of *Pudicitia* might have been mistaken for the lashes of a scourge. The picture of the conflict in the tenth-century *Psychomachia* in the British Museum (Add. MS. 24199) does not make it very clear which is Virtue and which Vice, and an illiterate copyist of some such picture might easily have transposed their weapons. The carving of *Humilitas* at Stanton Fitzwarren (pl. LVIII, *d*) seems to illustrate the evolution of this error, for although the Virtue holds what is evidently meant for a torch, the crouching Vice makes the same painful gesture of one who has been soundly birched which we see at Southrop! Another link between the enamel casket and the Stanton Fitzwarren font is the appearance of the down-trodden serpent beneath one of the contending pairs (*Fides-Idolatria*) on the casket.[1] An enamelled crozier in the Bargello at Florence is decorated with similar conflicts and has been associated stylistically with the Troyes casket.

The workshops of Worcester were a long way from either Southrop or Stanton Fitzwarren and neither of these churches belonged to the Priory, but transport on the Severn would have been easy as far as Gloucester and from there the Roman Road of Ermine Street probably still afforded reasonably good service in the twelfth century. Distance alone does not, therefore, rule out the possibility of the fonts having been made at Worcester.

I know of no recorded evidence that the Priory of Worcester was a noted centre of fine metal-work and enamel, but the first written mention of Limoges enamels occurs in a letter written *c.* 1170 by a monk called John, to the Prior of Saint-Victor de

[1] Reproduced in A. Katzenellenbogen, *The Allegories of the Virtues and Vices in Medieval Art*, 1939, pl. XI.

Paris.[1] The writer says that he has left Saint Satyre to accompany the Archbishop of Canterbury (presumably Thomas à Becket) and asks the Prior to refund to the bearer of his letter ten Angevin sous which he has borrowed for this journey. To prove his letter genuine he reminds the prior that he showed him a book-cover of Limoges enamel which he wished to send to the Abbey of 'WTGAM'.[2] Labarte, who republished this letter,[3] interpreted this strange place-name as Wingham in Kent, but Wingham was never an abbey. The more convincing reading of *Wigorn*, for Worcester, was put forward by Mr. H. P. Mitchell,[4] who suggested that the writer might have been John of Salisbury. Neither of these authorities explained why the writer, who was evidently very poor, should have wished, or been able, to make such a gift to a distant abbey, so it may be relevant to recall the fact that Roger, Bishop of Worcester from 1163 to 1179, and a cousin of Henry II, was one of the most faithful adherents of Becket, even risking his bishopric to visit him in exile in 1167. In 1170 he was entrusted by Becket with the charge of bringing back to England the Papal Brief forbidding the Archbishop of York and other English bishops to proceed with the coronation of the king's son in the absence of the Primate. Both in 1167 and 1170 Becket wrote to the Bishop of Worcester in terms of the warmest regard and he may well have wished to express his gratitude in concrete form. If the workshops of Worcester were then producing fine enamels, Becket might well have thought that his friend would be interested to see an example of the technique of a new centre, and the writer of the letter may have been merely the subordinate charged with *sending* the book-cover to Worcester, which is all that he actually says he was doing, in the mysterious letter. This is admittedly a double-edged argument, for it might be held that if the Worcester workshops were capable of producing the Balfour Ciborium they had little to learn from an early example of Limoges work!

Enamel-work of the late twelfth century has so few definitely local characteristics that the pieces here discussed have been ascribed, at various times, to northern France, the Rhineland, and to Limoges. Even after H. P. Mitchell had argued convincingly that they were English the identification of the religious house in which they must have been produced remained uncertain. It is my contention that the misericords in Worcester Cathedral have furnished immovable evidence that the designs which appear on the three enamelled ciboria were still being used in the workshops of the priory 200 years later, including the distinctive rendering of the Circumcision of Isaac. The connexion between the reference to Zipporah in the margin of the Eton manuscript and the representation of Moses on the corresponding misericord confirms the theory that the designs in this manuscript do record pictures associated with Worcester and most probably based upon the Chapter House wall-paintings, although there may have been some intervening pattern-book. If the less certain connexion between this manuscript and the fonts of Stanton Fitzwarren and Southrop, and between these fonts and the casket at Troyes and the Bargello crozier, be also

[1] Published in F. Duchesne, *Historiae Francorum Scriptores*, 1641, iv, p. 746.

[2] 'Oste(n)di vobis in infirmario tabulas texti de opere Lemovicino, quos volebam mittere Abbatiae de Wtgam.'

[3] *Histoire des Arts Industriels*, 1875, iii. 133–6.

[4] H. P. Mitchell, 'English Enamels of the 12th Century', *Burlington Magazine*, Oct. 1925, xlvii, 163 ff.

accepted, then the historians of Worcester can find on their fourteenth-century choir stalls proof that the Priory was an important centre of craftsmanship in the late twelfth century.

ACKNOWLEDGEMENTS

In addition to the copyright acknowledgements made under some of the reproductions I wish to thank: the Dean and Chapter of Worcester for permission to reproduce my photographs of the misericords in the cathedral; the Dean and Chapter of Bristol for permission to reproduce photographs by the late Miss Perry, plate L (*b*) and (*c*); the Provost of Eton and the Courtauld Institute for permission to reproduce plates LI, LII (*a*), and LIV (*b*); the Librarian of the Bibliothèque Royale, Brussels, for permission to reproduce plates LII (*a*) and LIII (*b*).

a. Marginal ornament from Book of Hours, printed by Thielman Kerver in Paris, 1507.
Reproduced by permission of the British Museum Trustees

b. and *c.* Bristol Cathedral. Grotesque subjects copied from similar engraving

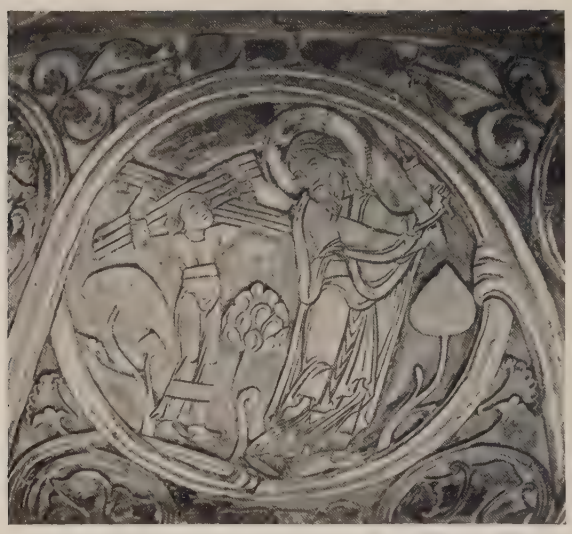
Decorative arrangement of typological subjects, Eton College Library, MS. 177

a. Bibliothèque Royale, Brussels
MS. 9961

b. Eton College Library
MS. 177

c. Worcester Cathedral

The Presentation of Samuel at Shiloh



a. Warwick Ciborium
Victoria and Albert Museum photograph. Crown copyright

b. Bibliothèque Royale, Brussels
MS. 9961

c. Worcester Cathedral

Abraham with Isaac bearing the faggots

a. The Warwick Ciborium
Victoria and Albert Museum photograph. Crown copyright

b. Eton College Library
MS. 177

c. Worcester Cathedral

The Circumcision of Isaac
National Buildings Record photograph

a. Worcester Cathedral

b. The Warwick Ciborium

Victoria and Albert Museum photograph. Crown copyright

The Sacrifice of Isaac

c. The Expulsion from Eden

d. Moses and the Brazen Serpent

e. Samson and the Lion

f. Judgement of Solomon

Worcester Cathedral

a. Two Prophets
Horniblow & Son, Worcester

b. Adam and Eve toiling

c. Mowing hay

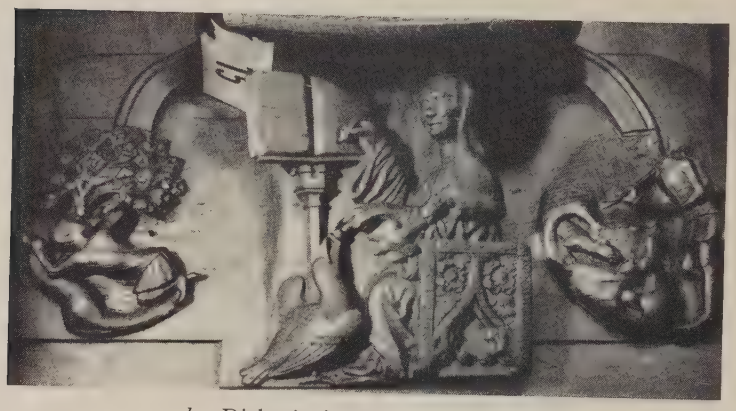
d. Binding sheaves of corn

e. 'The Clever Daughter'

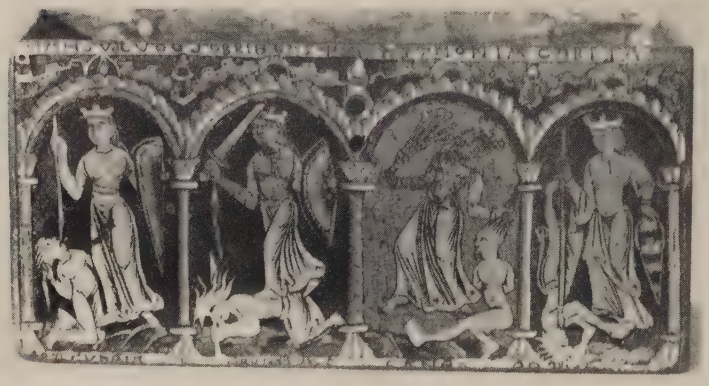
f. The Basilisk

Worcester Cathedral

a. Dialectica. Detail from diagram in the *Hortus Deliciarum*



b. Dialectica? Worcester Cathedral



c. Psychomachia. Enamel Casket in the Cathedral Treasury, Troyes
Archives Photographiques, Paris

a. Southrop font. Modestia and Patientia

b. Southrop font. Temperantia and Modestia

c. Stanton Fitzwarren font. Ecclesia and Cherubim

d. Stanton Fitzwarren font. Largitas and Humilitas

Psychomachia Fonts

The Rothschild Lycurgus Cup

By D. B. HARDEN, Esq., Ph.D., F.S.A., and
JOCELYN M. C. TOYNBEE, D.Phil., F.B.A., F.S.A.

[*Read 9th December 1954*]

I. INTRODUCTION

LORD ROTHSCHILD'S family has possessed, since the middle of the nineteenth century, one of the most interesting and important extant Roman cut glasses—the famous glass cup with metal mounts, the glass portion of which bears in open-work relief-cutting an elaborate rendering of the scene of the death of Lycurgus, mythical king of the Edoni, at the hands of the Dionysiac rout (pls. LIX–LXIV; figs. 1–2). It is not known exactly when the vase was acquired by the Rothschilds, but when it was first mentioned in print[1] in 1845 it was in M. Dubois's hands in Paris and it is thought to have been purchased by the present owner's great-grandfather shortly afterwards (although Michaelis, writing in 1872,[2] did not know its whereabouts). In 1862 it was lent to the South Kensington (now the Victoria and Albert) Museum[3] for a special exhibition. When Kisa was writing his great book on ancient glass in the early years of the present century it was in its Rothschild home and, as Kisa says,[4] was unfortunately not available to him for study. Few, if any, archaeologists can have seen it from that time onwards until the present Lord Rothschild brought it to light again in 1950 and consulted us about its history and affinities. By his kind suggestion we are now enabled to write the present account of the vase, its technique and its artistic import, based on much careful personal study of the piece, and on the excellent series of photographs (pls. LIX–LXIV) which were made for Lord Rothschild by Mr. Edward Leigh of Cambridge.[5] It is indeed surprising that such a

[1] J. Roulez, 'Lycurgue furieux' in *Ann. dell'Inst.* 1845, p. 114, n. 7 (signed 'J. (de) W(itte)'). Nothing is known of its history before that date.

[2] A. Michaelis, in *Ann. dell'Inst.* 1872, pp. 250, 257 f.

[3] *Catal. of a Special Exhibition of Works of Art of the Mediaeval, Renaissance, and more recent periods, on loan at the South Kensington Museum, June 1862* (ed. J. C. Robinson, F.S.A.), no. 4957, where a description of the vase is given, with no illustration, but with a reference to the engraving of it in De la Motte's *Choice Examples of Art Workmanship* (London, 1852), pl. 32 (with short description). The lender was Baron Lionel de Rothschild.

[4] A. Kisa, *Das Glas im Altertume* (1908), p. 612, n. 3: he says—wrongly it would appear from present records in the Victoria and Albert Museum—that the glass was exhibited for a long time at South Kensington.

[5] These photographs, and a short description of the vase, based in the main on our present text, were issued privately by Lord Rothschild in a beautifully printed and finely bound brochure at Christmas 1954 (Anon., *The Lycurgus Cup*, Cambridge, privately printed, 1954). We are very much indebted to Lord Rothschild for all his kindnesses during our prolonged work on this paper, and most particularly for agreeing to lend the six blocks of Mr. Leigh's photographs made originally for his own brochure.

Besides Lord Rothschild we also owe much to Professor W. E. S. Turner, F.S.A., and Dr. G. F. Claringbull of the British Museum (Nat. Hist.) for their help in technical matters (p. 180); to Mr. Ray W. Smith of Arlington, Va., who read the whole of Parts I–III in typescript and made many helpful comments; and to Mrs. M. E. Cox of the Ashmolean Museum for her painstaking and detailed drawings from which figs. 1, 2, and 4 are taken. Many other friends and colleagues have generously assisted us with advice and counsel, or have provided us with information about objects in their care. Some are mentioned in the appropriate places in the text: we hope that the others will accept a general word of thanks here and forgive us for not giving each and all of them specific mention.

fine monument of antiquity has had to wait for more than a century since it was first mentioned in print before it has been possible to give it the full and detailed publication warranted by its importance both as a *tour de force* of ancient glass-working and as an example of artistic endeavour.[1]

One of the things we had to decide in studying this vessel was whether its identification as glass was correct. No previous writer, it is true, had thought of querying this, and it had been seen and studied by several scholars, including Nesbitt, Dillon, and Sir Wollaston Franks, who were used to handling ancient glass and differentiating it from other materials. We must admit that we, too, did not doubt its vitreous nature, although we could not at first cite any other glasses, ancient or modern, which had an opaque green look on the surface, but turned to clear wine-colour or something similar when viewed through transmitted light (see below, p. 188),[2] and our technical knowledge of glass-working was insufficient to explain how such a phenomenon could be brought about, whether in the initial process of manufacture, or afterwards by weathering or transmutation of colours. We also noted that the vessel seemed to show no trace of any iridescence or pitting weathering;[3] and this fact, though not conclusive (for other Roman glasses without such weathering do exist) also produced caution in our minds. We, therefore, with Lord Rothschild's consent, invited Professor W. E. S. Turner to inspect the vase, and his tentative report, based on the general texture of the object, the absence of any evidence of weathering, and the failure of the object to give any positive reaction to superficial tests for alkali, induced him to advise caution in accepting the vessel as undoubtedly of glass. He felt that the next step should be to invite the opinion of a mineralogist, and so, at our suggestion, Lord Rothschild agreed to submit the vessel to Dr. G. F. Claringbull, keeper of the Department of Mineralogy in the British Museum (Natural History), who, after testing, expressed the view that the vessel was glass, although it showed one or two curious phenomena such as would fully justify Professor Turner's tentative doubts.

[1] Before this paper went to press, but after it had been read before the Society in December 1954 and after the issue of Lord Rothschild's brochure, Mr. E. Coche de la Ferté, whose interest in this vase had arisen before he knew of our work, published an article upon it, principally from the iconographical point of view, entitled 'Le verre de Lycurgue', in *Monuments Piot* (Fondation Eugène Piot: Monuments et Mémoires publiés par l'Académie des Inscriptions et Belles-Lettres), xlviii, fasc. 2 (1956), 131–62.

All publications previous to Coche de la Ferté's were inherently fragmentary in the information they provided, and even taken together they gave but a meagre account of the piece. The most important (omitting all which merely mention it casually as an example of open-work relief cutting) are:

J. Roulez, *op. cit.* (in note 1, p. 179).
De la Motte, *op. cit.* (in note 3, p. 179).
Robinson (ed.), *op. cit.* (in note 3, p. 179), no. 4957.
A. Michaelis, *op. cit.* (in note 2, p. 179).
A. Nesbitt, *A descriptive Cat. of the Glass Vessels in the South Kensington Museum* (London, 1878), p. 33.
A. Kisa, *Das Glas im Altertume* (1908), pp. 612 ff., 629 f., fig. 233.
E. Dillon, *Glass* (1907), p. 73, pl. viii.
W. Froehner, *La Verrerie antique: descr. de la coll. Charvet* (1879), p. 90 f., in a chapter entitled 'verres soudés', for F. thought the cage-cups were made by fusing the inner and outer portions together.
G. Eisen, *Glass* (1927), pp. 455 ff., fig. 111, *c*.
F. Fremersdorf, 'Die Herstellung der Diatreta', *Schumacher Festschrift* (Mainz, 1930), pp. 295 ff.

The only photographic illustration is that in Dillon's book. Kisa's drawing, which Eisen copies, is a poor one made from De la Motte's engraving. Some further references will be found in Coche de la Ferté, *op. cit.*, p. 131, note 1.

[2] It was only later that Mr. R. J. Charleston kindly pointed out to us the fragment of cut glass in the Victoria and Albert Museum from Oxyrhynchus (Behnesa) in Egypt (pl. LXIX, *b*), and one of us (D. B. H.) found the cage-cup fragment in the British Museum (pl. LXIX, *a*; Appendix B. 7), both of which exhibit a similar change, though to a clear brown (p. 188).

[3] But see p. 188, note 5.

We, therefore, will assume in this article that the vessel is glass—however unusual, for glass, some of its attributes are.

We also had to consider whether the vessel—omitting, of course, the metal mounts which are comparatively modern work—was ancient. Close study of the technique of manufacture and of the artistic quality of the decoration quite convinced us that there could be no question of the vessel being later in date than what in general terms may be described as 'late antique'. It must, in fact, be placed before rather than after the middle ages. It is well to state this at the outset, shortly and categorically. No open-work cutting of this kind is known to have been practised in any glass-working region since ancient times, except for a number of specifically experimental imitations of ancient cage-cups made in Bavaria in 1881,[1] and some Chinese glasses of similar style mentioned by Coche de la Ferté.[2] Our more detailed analysis of its probable date—the fourth or fifth century A.D.—is better reserved until the conclusion of our story, after the piece has been fully described and the parallels for its glassmanship and its art have been adduced and discussed. It is fair to add that no previous writer has cast doubts on its antiquity in print. Doubts were, however, expressed verbally to one of us while our study was in progress, but were not backed by real and convincing arguments.

II. DESCRIPTION OF THE ROTHSCHILD CUP AND ITS PARALLELS WITHIN THE CAGE-CUP FAMILY

The vessel (pls. LIX–LXIV; figs. 1–2) as now extant consists of an ancient glass cup (incompletely preserved) with a more modern (probably nineteenth-century) gilt-bronze rim and stemmed base. The metal rim has been folded over the present edge of the glass cup. On the outside it takes the form of a frieze of downward-pointed stylized leaves, while it is plain on top and on the inside. The metal base has been fixed with an adhesive on to the bottom of the glass: there appears to be no attempt at dowelling or any similar process. It consists of a spray of eight stylized leaves bent upwards to grip the glass, below which there is a solid stem with central moulding, splaying out, in its turn, into a second spray of eight stylized leaves, the tips of which are soldered on to a flat metal ring forming a footstand for the vessel.[3]

The glass cup itself is of the type which has now come to be termed a *diatretum*[4] or,

[1] Kisa, *op. cit.* (in note 4, p. 179), p. 619, note 1. Mr. Ray Smith informs us that he recently saw in Venice an imitation of the lost Strasbourg cup (p. 210, B. 10), but made by moulding, not cutting.

[2] Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 154, note 4.

[3] Without removing the metal mounts—an action which Lord Rothschild, understandably, was unwilling to agree to—it is not possible to be more specific about how the stem was affixed, or about the shape of the extant edges of the glass now hidden by the mounts.

[4] Though many modern writers have used the term *diatreta* for these vases exclusively, that term really belongs, as Kisa recognized (*op. cit.* (in note 4, p. 179), pp. 624 ff.)) to all cut glass. In ancient writers glass-cutters are called *diatretarii* and their products *diatreta*. It is better therefore to choose another term, and we readily adopt W. A. Thorpe's 'cage-cups' for this family of open-work cut glasses (see his 'The prelude to European cut glass' in *Trans. Soc. Glass Technology*, xxii (1938), 17 ff., for a full account of glass-cutting and *diatretarii* in Roman times).

The literature on *diatreta* and *diatretarii* is extensive; see, e.g. Kisa, pp. 606 ff. and footnotes; O. Lenel and R. Zahn in *Jahrb. deutsch. arch. Inst.* xliii (1928), *Arch. Anz.* 563 ff. and reff. *ad. loc.*; Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 295 ff., etc. Cf. also O. Kurz in J. Hackin and others, *Nouvelles recherches arch. à Begram* (Mém. délég. arch. franç. en Afghanistan, xi), pp. 99 f. for discussion and criticism of some of Thorpe's views.

better, a cage-cup. This family of vessels has received great attention from writers on ancient glass, not so much for the artistic qualities of the majority of the extant specimens as for the fact that they are *tours de force* of glass-working. More will be said about cage-cups in general below and a full list is given in the Appendix, pp. 203–211. For the time being it will suffice to remark that these vessels are made by cutting and grinding open-work decoration out of a thick blank of cast or blown glass, the decoration adhering to the wall of the inner portion by small shanks or bridges which have been left for this purpose by the glass-cutter. Some earlier writers took a different view, and claimed that the cage was carved from a separate blank, the inner portion and the cage being made separately and joined together afterwards by fusion. This view has now been generally abandoned. The best account of the manufacturing process (fig. 3) will be found in Fremersdorf's article of 1930.[1]

Our present piece belongs to the group of cage-cups (Appendix, Group A) which have a figured scene in open-work—a group which also includes the *situla* in the Treasury of St. Mark, Venice (A3), with an upper frieze of huntsmen above a lower one of network (pl. LXV), the Cagnola cup, now in Varese (A2), which has tragic masks between columns (pl. LXVI, *a*, *b*), the cup from Szekszárd in Hungary (A4), which has fishes and snails on its base, below an inscription (pl. LXVII, *a–c*), and a fragmentary beaker from Begram in Afghanistan (A8), which shows a walled sea-port with a ship and two boats in the harbour (pl. LXVIII, *a–c*), as well as some other fragments.

The scene on our piece is described fully below (pp. 193 ff.). It consists, briefly, of a representation of the death of King Lycurgus, who is engulfed in a vine; at his feet sits the nymph Ambrosia; to the right of Ambrosia is a satyr prepared to hurl a rock; to the left of Lycurgus is Pan being egged on to attack the king by Dionysus, accompanied by his panther. The figures and all subsidiary details are carved mainly in open-work and cover the whole of the extant vessel from just below the rim down to a horizontal ring of glass which serves to represent the ground on which the figures stand.

The metal additions hide the existing edges of the glass both at the top and at the bottom.[2] That the glass is partially broken away both at its rim and at its base is clear, and the metal additions are intended, in part, to mask these breaks. It will be noted that in the top band of metal there are two groups of three larger leaves diametrically opposite each other. One of these groups masks a gap in the glass: the other does not, but has been added for symmetry only. Apart from fractures at the rim, the extent of

[1] Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 295 ff. Yet the old view was so often repeated that it dies hard, and is still at times reproduced, e.g. by J. Hackin in publishing the Begram piece (Appendix, A8 and ref.).

Recently a German glass technician in Geislingen, Karl Wiedmann, has described ('Das römische Diatret' in *Glastechnische Berichte*, xxvii (1954), 33–40—an article reprinted in enlarged form as 'Die Herstellung römischer Diatretgläser' in *Trierer Zeitschrift*, xxii (1953), 64–84)—how he has made imitations of ancient cage-cups by blowing a double-walled blank, adding blobs of glass which were afterwards pushed in to form the bridges, and then proceeding by the normal cutting process. This might work with network cages, but it is difficult to see how it would do for the figured scenes. Wiedmann claims that if Fremersdorf's system were adopted far more signs of polishing and grinding than actually exist should still be visible all over the vessels. Yet Fremersdorf's method is the most natural and obvious one and Wiedmann's case against it must be taken as non-proven, in our view, even for the network cages (see further 'Postscript', p. 212).

[2] See note 3 on p. 181.

which cannot be determined without removing the metal band, there are cracks in the wall of the vessel above the figure of Ambrosia and between Lycurgus and Pan, and portions of the open-work decoration are also missing, notably Dionysus's left knee and shin, the vine stalk above Ambrosia's feet, the top of the vine above Lycurgus's right arm, the panther's maw, the tips of Pan's phallus and left horn, and the whole of Pan's right horn. There is also a gap under the panther's belly, where there is the remains of an attachment for part of the ground line, which is here missing. As regards the original rim of the glass, it will be noted that the Cagnola

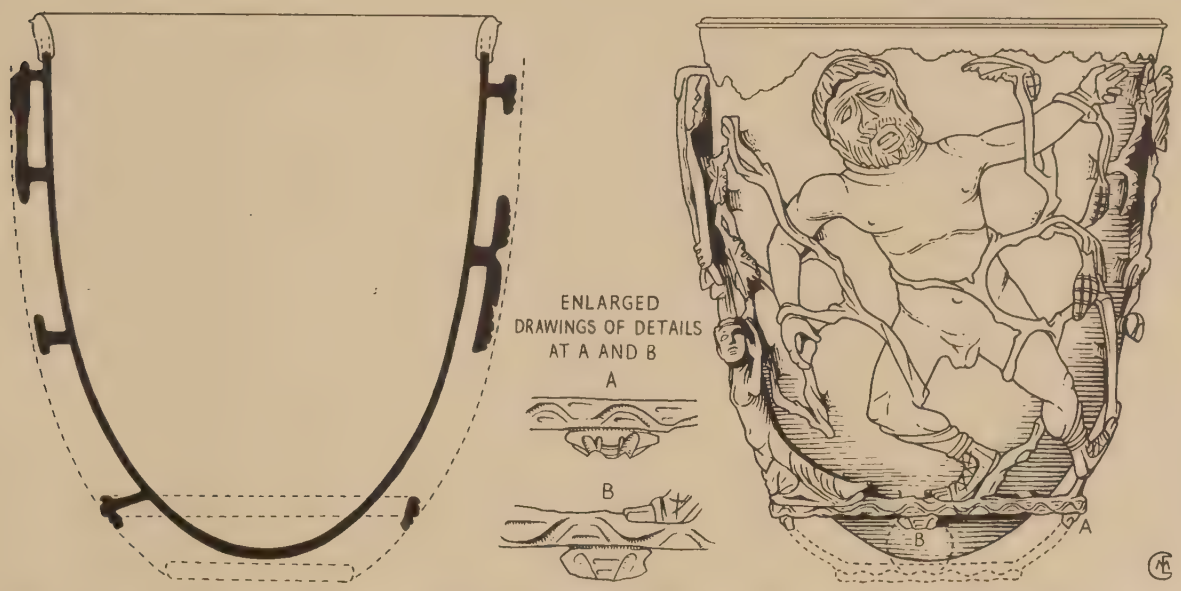


FIG. 1. The Lycurgus cup: section and elevation to show suggested reconstruction of base (p. 184). Scale ½. From a drawing by Mrs. M. E. Cox.

and Begram pieces (pls. LXVI, *a*, *b* and LXVIII, *a–c*), both near relations of ours, and indeed all other cage-cups, the rims of which are extant, except two, have a tallish splayed rim above the top edge of their open-work decoration. The exceptions are the Venice 'hunt' *situla* (pl. LXV) and the Soria (anc. Termancia) cup (pl. LXXI, *d*), which have an equally high rim, though of a different shape. We suspect, therefore, that our piece probably had a much taller rim than now appears. Such a rim would greatly improve its appearance and proportions, especially if, as we believe, the vase once stood on an open-work base and not on a stem.

This brings us to a discussion of the base. Apart from the Venice 'hunt' *situla*, which has a plain ring-base like that of a modern bucket—to tone in with its bucket shape—all other cage-cups appear to have had open-work bases of one sort or another, which extend below the rounded bottoms of their inner cups (which are all hemispherical or U-shaped) and enable the vessel to stand, albeit not always very stably. The Cagnola cup stands on an open-work ring which joins the bases of its four columns (pl. LXVI, *a*, *b*), the tiny cup from Szekszárd in Budapest stands on three fishes carved

in relief (pl. LXVII, *a–c*), the Begram piece probably had a similar open-work base,[1] and the ordinary network cage-cups stand usually on one or more meshes of their network. We therefore came to the conclusion at an early stage of our study of the Rothschild cup that it must have ended somewhat similarly,[2] particularly when we noted that the ground line beneath the figures shows (though they are not readily visible in the photographs) portions of four leaves at equidistant intervals (A, B, fig. 1), the tips of which extended downwards and may have helped to form some sort of stand—perhaps another ring parallel with the ground line. The vessel cannot have stood on the ground line itself because the inner bowl extends about $\frac{1}{2}$ in. below that line.

The vessel now stands 8 in. high (with metal stem) and the diameter of the present rim is $5\frac{1}{5}$ in. outside and $4\frac{4}{5}$ in. inside. The total thickness of the rim (with the metal binding) is therefore $\frac{1}{5}$ in., and the thickness of the glass at the rim is just under $\frac{1}{8}$ in. The diameter of the metal foot is 4 in. The internal height of the bowl is about $5\frac{7}{8}$ in. and its external height is approximately 6 in., making the thickness of the glass at the base about $\frac{1}{8}$ in. The external diameter measured across the vase at the level of the heads of Lycurgus and Dionysus is $5\frac{1}{2}$ in. The bridges rise about $\frac{1}{4}$ in. from the outside of the inner wall at this point; lower down the vase their projection averages about $\frac{3}{8}$ in., showing that the original blank from which the vase was cut was, as one would expect, thicker towards the bottom than it was at the rim.

The method of manufacture of the vessel differed a little from that of all other cage-cups. The most noteworthy point of difference is that the four main figures have their bodies hollowed out from behind on the interior of the cup (fig. 2) with a certain amount of undercutting at the edges, and the two smaller figures (Ambrosia and the panther) have a longitudinal tubular boring closed at one end, that of Ambrosia being from the buttocks upward to the head, and that of the panther being from the head to the buttocks. The only other cage-cup showing a similar hollowing or boring is the 'tragic-mask' fragment (Appendix, A7), but on it the boring is much shorter and wider and thus differs less from normal undercutting.

Some earlier writers have claimed that the hollows behind the main figures were originally mould-blown. Though this might be true of them (even despite the undercutting, which might have been added afterwards), it could not be true of the borings in the smaller figures, and it seems more likely that all these hollows and borings were made by cutting and grinding.[3] To be mould-blown the hollows would have had to be made before the figures were carved, and they follow the shapes of their figures

[1] It is now wrongly restored (pl. LXVIII, *a*, *b*) with a ring-base for which there is no evidence (see p. 206 below). Coche de la Ferté, in fact, states quite wrongly that this piece, the Venice *situla*, and the Cagnola cup all have 'une assise solide' (*op. cit.* (in note 1, p. 180), p. 156). However much the faulty restoration of Begram and the unrevealing illustrations of Venice might mislead him, there is no doubt, even from Kisa's illustration (Kisa, fig. 228), that the Cagnola base was an open-work one.

[2] This view of ours was adopted by Lord Rothschild in his short account of the vase, *op. cit.* (in note 5, p. 179), p. 3, and was elaborated in a drawing by Coche de la Ferté (*op. cit.* (in note 1, p. 180), p. 134).

[3] The boring in the panther is not straight, but slightly curved, following the curvature of the vessel, and so is the undercutting beneath the head on the 'tragic-mask' fragment. This point deserves mention, though it does not, we think, affect our argument in this paragraph. It is a pity that Coche de la Ferté (*op. cit.* (in note 1, p. 180), p. 156), despite all that Fremersdorf and others have written and the good lead they have given, should have returned quite unnecessarily to the mistaken idea—prevalent in the nineteenth century—that parts or all of the Lycurgus design were moulded separately and joined to the vase by fusion. We cannot too strongly discountenance any such theory.

so closely that it seems most unlikely that they were made before the figures existed. Moreover, when so much cutting of an elaborate kind was to be done, why bother to make those rough hollows in any other way than by cutting? No other cage-cup—

FIG. 2. The Lycurgus cup: sections and other constructional details (pp. 184 ff). Scale just under $\frac{1}{2}$. From a drawing by Mrs. M. E. Cox.

not even the Venice 'hunt' *situla*—has internal hollows, and it seems that they were put there as an afterthought by the glass-cutter owing to the peculiar coloration of the glass, so that no particularly thick portions of the vessel should exist to make the purple colour (see below, p. 188) too uneven when viewed in transmitted light. If the hollows were made after the main design had been cut, so, too, probably were the

borings in Ambrosia and the panther. All this is not to say that the original blank from which the vase was cut may not have been mould-blown, as the blanks for all cage-cups are thought to have been.[1] It is known that the glass-makers (*vitrearii*) who

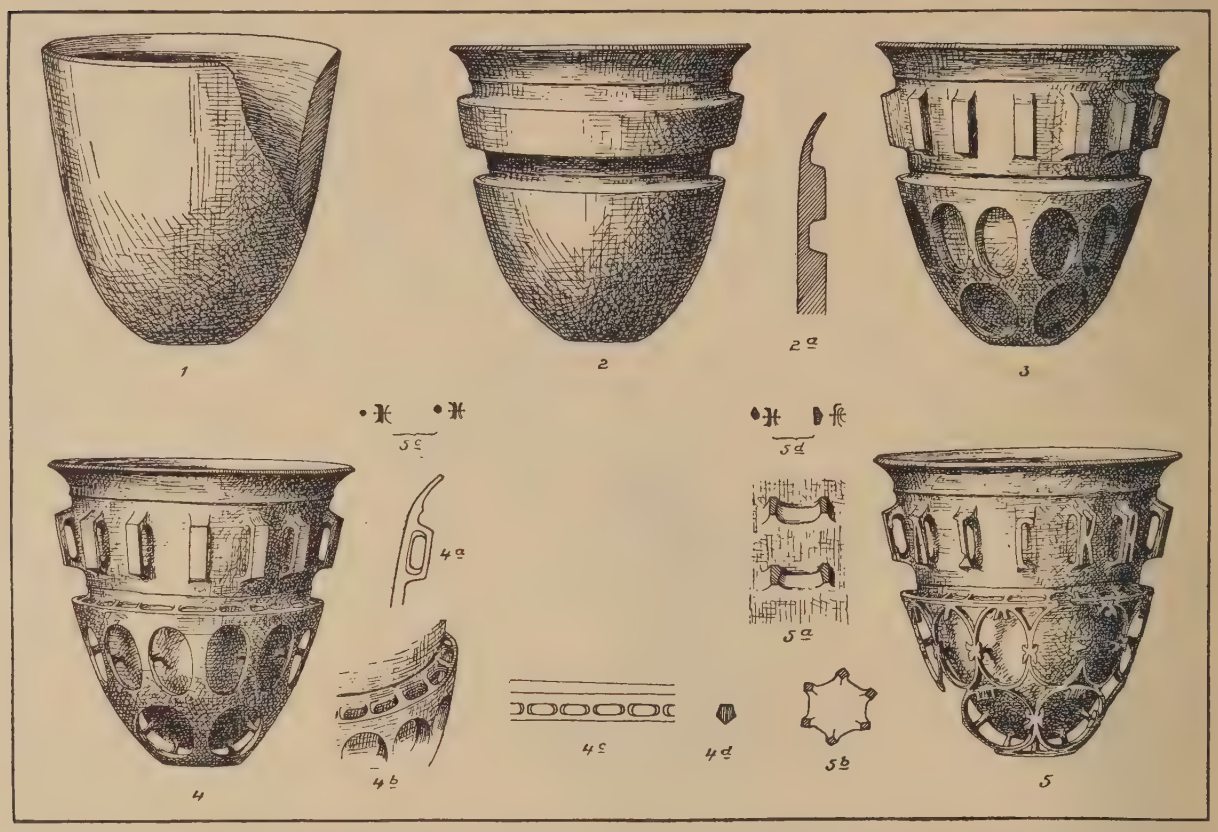


FIG. 3. Dr. Fremersdorf's sketches showing suggested stages in the production of the Berlin cage-cup (Appendix, B1) from a blank by the *diatretarius*. Scale $\frac{1}{2}$. After F. Fremersdorf, *Schumacher Festschrift* (Mainz, 1930), fig. on p. 296.

prepared the blanks were different people from the glass-cutters (*diatretarii*) who decorated them and finished them.[2] The *vitrearius* would not necessarily know what decoration the *diatretarius* intended to apply. He would therefore provide a perfectly plain blank of the type sketched by Fremersdorf (fig. 3) and leave all the rest to the *diatretarius*.

The next point of difference between our piece and the more normal network cage-cups is the shape of the shanks or bridges (which on this vase vary in height between $\frac{1}{4}$ and $\frac{3}{8}$ in.). This, too, is dependent on the type of decoration, for bridges for figure and plant forms must vary considerably according to the shape of the cage-work, and cannot always be plain prisms or cylinders, as they are for the ordinary network patterns. The bridges on the Rothschild cup (fig. 2) are usually elongated oval in

[1] Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 295 f. and fig. on p. 296 (from which our fig. 3 is copied).

[2] Thorpe, *op. cit.* (in note 4, p. 181), pp. 17 ff.

section, and mainly between $\frac{1}{4}$ and $\frac{1}{2}$ in. long. The figures themselves have, of course, no bridges, being hollowed behind or bored out (see above). The bridges on the Venice 'hunt' *situla* are quite different and equally varied (see p. 204 and pl. LXV, where the lighter-toned portions of the figures indicate the position of the bridges), and so, too, probably are those on the Begram piece. There was also a considerably greater quantity of free-standing work, especially on the vine branches and other narrower portions, and this explains why some portions have so easily been broken away.

Basically, however, the technique of this vase and of the other cage-cups is the same, namely carving *à jour* from a thick-walled blank (see fig. 3 for the various stages in the process), and it cannot be too often stressed, having regard to what has been said by earlier writers, that there is no question of the cage having been made separately from the inner cup. These cage-cups are elaborate work, it is true, but they are in a sense no more elaborate than much of the Roman relief-carving on marble sarcophagi and other monuments, on many of which whole figures, limbs, etc., are carved almost, if not completely, in the round and *à jour*. Given smaller tools for work on a much smaller scale, the one should be no more difficult than the other, allowing, of course, for the possibly more brittle nature of the glass-cutter's medium.

Once the cutting and the grinding had been done, the ordinary cage-cups appear (from such photographs as we have seen) to have been left alone, and given only a slight polish, if any. Not so the Rothschild vase. The whole surface of both layers, inside and out, shows a remarkably glossy finish—such a gloss as would be difficult to produce by rotary polishing and may indicate that the vase was subjected to flame-polishing.[1] If we compare the surface finish of the detailed cutting on our vase with that on the Venice 'hunt' *situla* (pl. LXV), the Begram beaker (pl. LXVIII), or the Cagnola cup (pl. LXVI) we shall notice that no sharp edges remain on our piece, whereas the three others, and more particularly perhaps the Cagnola cup, have considerable sharpness on the edges of their figure-work and network. Moreover there are few traces of any marks of the grinding wheel extant, and none on the smooth inner surface of the cup, where one might expect to find them most easily.

We now come to a consideration of the colour, metal, and surface-condition of the glass, subjects which are best dealt with together. The present surface-colour of the vase is a dull pea-green tint, with no transparency, a colour which even appears on fractured edges as well as on all parts where the original unbroken surface is still extant. A large patch, however, of one side of the vase, comprising the greater part of Lycurgus's body, the lower part of Ambrosia's legs, the top of the axe, and neighbouring portions of the vine, but not, surprisingly, the contiguous portions of the inner cup, show a surface-colour yellower than that of the rest of the vase (fig. 2). Moreover, the patch is absolute, and there is a sharp junction, without any gradual fading, between the two greens, although this is not readily visible in the photographs. The peculiarity of this vase, however, is that when looked at in transmitted light the green colour and the opacity disappear and the glass changes to a transparent wine colour,

[1] This action would be very risky, and seems an inherently unlikely one for a *diatretarius*, who presumably would have no furnace near by, to adopt; yet we feel that the possibility exists.

or, where the yellower patch occurs, a transparent amethystine purple (see above, p. 180). One parallel for such a transformation of colour, kindly pointed out to us by Mr. R. J. Charleston, is on a facet-cut fragment from Oxyrhynchus (Behnesa) in Egypt, now in the Victoria and Albert Museum (pl. LXIX, *b*),[1] and another is the cage-cup fragment in the British Museum (Appendix, B7; pl. LXIX, *a*). Both are opalescent buff on the surface, but change to a clear brown in transmitted light. Mr. Ray Smith tells us that similar glasses are known from Arab times. What is the reason for the changes of colour and how were they brought about? Are they intentional on the part of the glass-maker or are they changes that came about accidentally either at the time of manufacture, or subsequently? It was this colour change amongst other things which led Professor Turner to think that the vase might be an opal or a jade, though he was aware that some opal glasses do have this variability of colour as one of their features. According to Nesbitt[2] (whom Kisa[3] copies), Sir Wollaston Franks apparently formed the view that 'the colouring matter' was 'copper, but the glass has not been brought to the state in which it becomes ruby'. Kisa adds: 'it is, however, always possible that this play of two colours was brought about intentionally by an unusual experiment in the glass-oven'. Nesbitt further guessed that the *calices allassontes versicolores* mentioned in *Script. Hist. Aug.* (Flavius Vopiscus, *Firmus, Saturninus, Proculus, and Bonosus*, 8, 10)[4] may have been similarly coloured: *versicolor* may merely mean polychrome (parti-coloured), but *allassontes* certainly suggests a change from one colour to another.

The reason for the yellower colour of the patch covering most of Lycurgus's body eludes us. Can this be a sort of transmutation of colour caused by this side of the vase having had greater exposure to light or some other weathering agent? This does not seem likely, for had things so happened, the division between the two colours would probably have been gradual and not sharp. Moreover the portion of the cup behind Lycurgus would have been equally exposed and should therefore have taken on the same tint: and it has not done so.

The absence of weathering, whether of the iridescent or pitting or cloudy variety, has already been noted.[5] This helped Professor Turner to form his tentative view that the vessel might be stone and not glass. Yet, though it is true that most ancient glasses, even those that come from dry and sandy Egyptian sites, have at least faint traces of iridescence, the rule is by no means universal, and sherds and complete glasses showing no weathering whatever have come from burials not only in Egypt, but in Britain and western Europe also. Indeed, if this piece had never been buried, but handed down from antiquity as a treasured possession in some sanctuary—as it may well have been—there is even less reason to assume that it would have acquired some weathering on its surface. The body of the glass is full of small bubbles and some impurities in

[1] No. 691–1905—date uncertain but probably Arabic rather than Roman; the mounds of Behnesa have produced written documents in Arabic, as well as in Greek and Coptic. We are much obliged to the Director of the Victoria and Albert Museum for kindly supplying the photograph of this fragment through Mr. R. J. Charleston.

[2] Nesbitt, *op. cit.* (in note 1, p. 180), p. 33.

[3] Kisa, *op. cit.* (in note 4, p. 179), p. 613.

[4] See Loeb ed. (trans. D. Magie), iii (1932), 400.

[5] Mr. Ray Smith, however, who was good enough to read and comment upon this paper in manuscript, tells us that he thought he saw some pitting of the surface in some of the cut grooves. It should be added that weathering exists on both the Behnesa piece (pl. LXIX, *b*) and the unprovenienced British Museum fragment (Appendix, B7; pl. LXIX, *a*).

the form of dark specks. The bubbles could have existed in stone as well as in glass; the dark specks of impurity are a completely vitreous characteristic, in our view.

III. DATE AND PROBABLE ORIGIN OF THE ROTHSCHILD AND OTHER CAGE-CUPS

We divide known cage-cups into two main groups, those with figures or other representational decoration (Appendix, Group A) and those with network decoration, but no figured scenes (Appendix, Group B). The first group in our list contains fifteen examples, the second eleven, making twenty-six in all. Inscriptions occur on vessels of both A and B groups, but are not invariably present in either group. Most cage-cups are of colourless glass which, even if cloudy now, was once transparent, the exceptions being the Rothschild cup and the British Museum fragment (A1 and B7 with transmutation of colour, see p. 188), the 'hunt' *situla* in Venice, and the Soria cup in Madrid (A3 and B11, greenish and greenish-grey, respectively), the Dionysiac fragment in the Metropolitan Museum (A6, olive-green), the Trivulzio cup in Milan (B6, with a partly blue and partly green cage on a colourless inner cup), the lost Strasbourg piece (B8, with a partly purple and partly green cage on a colourless (?) inner cup), the fragments in Mainz, the British Museum 'tragic-mask' fragment and the Cyzicus piece in the Louvre (A7, 11, 14 and 15, made from cased blocks of blue on colourless metal), and the Leiden fragment (B3, deep purple on colourless metal).

When we come to consider the proveniences (fig. 4) of known examples, we find that of the fifteen pieces in Group A, five are from Italy and its islands, two from the Danubian lands, one from the Rhineland, one from Britain, one from Asia Minor and two from Afghanistan, while three are of unknown provenience. On the other hand, of eleven pieces in Group B five are from the Rhineland or north-eastern France, two are from Italy, two are from the Danubian lands, one is from Spain and one has no provenience. Such a distribution-pattern indicates that if all these vessels are to be considered as stemming from one place of manufacture, that place must have been a central glass-making area—Italy itself most probably. It is unlikely that either the Rhineland or the Near East can come into consideration as a possible location of such a factory. Thorpe has suggested that all cage-cups were made in Aquileia.[1] On the other hand the great preponderance of Rhenish and Danubian find-spots for the network group (B) is noteworthy. Many believe that they are Rhenish, and, more specifically, from Cologne, and since the known mobility of glass-workers in antiquity led to quick transfers of new techniques and processes, two or even more places of manufacture for cage-cups as a whole are by no means out of the question. If there was more than one factory, the division between them might not follow strictly the two groups A and B. More probably the Szekszárd piece (A4) and its near relation (A5) in Group A would have been made in the factory that produced Group B: shape, design, and provenience all confirm this view, and we may note also that these are the only two inscribed pieces in Group A. At the same time the Spanish example, B11, has characteristics which make it resemble very closely the Venice

[1] But see now Kurz, *loc. cit.* (in note 4, p. 181), for the possibly false basis on which Thorpe's claim partially rested.

'hunt' *situla* (A3), and differentiate it strongly from the remainder of Group B. But even allowing for these 'transfers', it would be rash to assume that we can postulate a single 'A' and a single 'B' workshop. This might be true of the 'B' group, but

FIG. 4. Map showing the distribution of cage-cups of the A (circles) and B (triangles) varieties, see pp. 89 ff., and Appendix, pp. 203 ff. From a drawing by Mrs. M. E. Cox.

there are such strong differences in technique between the Cagnola, Venice, Rothschild, and Begram pieces that it is certain that more than one *diatretarius* was involved in the 'A' group, even if (which is doubtful) they were all produced in one locality and more or less contemporaneously.

We can only guess where these workshops could have been. Italy, Alexandria, and Syria (Antioch?) are all possibilities on grounds of artistic treatment, but it is exceedingly doubtful whether Syria was capable of producing such good cutting in the fourth century A.D.—the date (see below) to which we ascribe the majority, at least, of

these vessels, and even Alexandrian cutting had deteriorated very greatly by Constantine's time, if we may judge from the Karanis evidence.[1] This leaves Italy, and on the whole we incline to the view that all these vessels of Group A, with the exception of the Begram ones (A8–9), may have been made there. The Begram 'harbour' beaker is a difficulty. If it is true that it delineates the *pharos* of Alexandria it should be of Alexandrian make and it might, then, be the eastern 'prototype' from which the others were derived—another example of the movement of glass types and decorations from east to west.

Now we note from the Appendix that while most of these glasses have no external dating evidence attached to them, there are several—all in Group B—which possess some. B1 and B2 were found in two stone sarcophagi (an indication in itself of late-third-century date at earliest) with coins of Constantine II and Trajan respectively. B4 had three accompanying glasses, all of which are more likely to be after rather than before A.D. 300. B9 was in one of three associated sarcophagus-burials, one of which had a coin of Licinius of the early fourth century, and B9 itself was accompanied by a pipette-shaped unguent-bottle of recognized fourth-century type. Finally, B10 was with a gold coin of Constans I and is inscribed with the name of the Emperor Maximian. All this provides a most consistent picture of an early fourth-century milieu and we cannot fail to accept it for the 'B' group, including A4 and 5. Can we assume that the 'A' group (including B11) is contemporary?

The Begram cache, in which A8 and 9 occurred, was obviously a 'collection'—whether looted or not—and its contents have been dated by scholars very variously within the Roman period. Kurz[2] believes that all the glasses in the cache belong to the second half of the first century A.D. There is, however, no inherent reason why the material in such a cache must all be of one date. While we agree that many of them, e.g. the millefiori and pillar-moulded bowls and the goblets with facet-cutting, are of that date, we are unable to accept it for others, e.g. the vessels in the shape of fish and those with open-work trails. We are not, therefore, bound to accept such an early date for the Begram cage-cups, particularly since there is no evidence that the cache was 'closed' so early. Hamelin (*Cahiers de Byrsa*, iii (1953), p. 123, note 2) states that the destruction and closure of the cache took place in face of a Sassanian attack which Ghirshman attributes to Shapur I, *c.* A.D. 251–3. Such a date would be about the earliest possible for the fish-vases and open-work trail vases and we should prefer to ascribe them and the 'harbour' beaker to the fourth century on grounds of style. Unless, therefore, further study of the stratification produced positive proof that they were buried so early we feel bound to query Ghirshman's date; and as the Venice 'hunt' *situla*, the Cagnola cup, and the Lycurgus vase are, on artistic grounds, most likely to belong to the 'late antique' period—the fourth or fifth century A.D. (see pp. 200 f. below)—it is most likely that all the cage-cups fall within those limits of date, the Begram pieces being perhaps a little earlier than the rest, and providing the eastern prototypes (see above) from which the others were derived.

[1] D. B. Harden, *Roman Glass from Karanis* (Ann Arbor, 1936), pp. 22, 32 f. The best colourless cut ware belonged to fabric 2, which was predominantly a second-century ware, though it lasted into the third century. Fourth-century cut glass was poorer and of the 'scratched' variety (*ibid.* p. 20, variety (*c*)).

[2] Kurz, *op. cit.* (in note 4, p. 181), p. 108

There is, however, a piece of comparative evidence for the date and origin of the Venice 'hunt' *situla* which deserves mention, especially as it may suggest an even later date for it than we have postulated above. In the mid-nineteenth century a bronze *situla* of exactly the same form (pl. LXX, *c*) was found in an Anglo-Saxon interment at Cuddesdon in Oxfordshire. All the objects from that interment are now, unfortunately, lost: but the *situla* and two of its accompanying glasses were well published in coloured drawings by J. Y. Akerman[1] and the glasses are of the deep-blue metal and of the squat-jar form which is so characteristic of the seventh century in British finds.[2] The *situla* itself is clearly one of the numerous bronze shapes which are thought to have been imported into western Europe from Coptic Egypt in the Dark Ages.[3] Most of these bronzes come from seventh-century milieux in the west, although in Egypt and the Sudan they occur at least from the fifth century onwards, if not earlier. The Cuddesdon bronze *situla* cannot, so far as our knowledge goes, be directly paralleled, although similar, but squatter, varieties exist, e.g. one formerly in the Berlin collections from Gizeh, which Wulff[4] dates fourth to sixth century. Thus the Cuddesdon *situla*—which was repaired in antiquity, as Akerman's drawing shows—might have its origin in Egypt some time between the fourth and sixth centuries A.D. and might support a similar date for the Venice 'hunt' *situla*, which is clearly an imitation of this metal type.

For cage-cups in general there are two other pieces of comparative evidence. One is a fragment of a silver vase from the Traprain Treasure,[5] generally dated fourth to fifth century, which bears a cage-cup pattern of network. Whether the silver copied the glass or vice versa is not in point, but the comparable date is important, whichever material was the forerunner of the other. The other is a group of dark-age glasses in the west which are clearly copies of cage-cups of Group B. Attention was drawn to this parallelism by G. Behrens in 1929[6] in publishing an example of this dark-age type in the Röm.-Germ. Zentralmuseum, Mainz, from France, and it is also referred to by R. F. Jessup in discussing a similar piece from Westbere,[7] as well as by Fremersdorf[8] from the cage-cup point of view. These dark-age glasses are bowls with a mould-blown network pattern and sometimes with a nonsense inscription above. To judge from their shape they cannot be earlier than the sixth century and are more likely to be of the seventh.[9] We need not, of course, assume that this must affect the dating of the cage-cups themselves: a copy can be much later than its original. It is interesting to note, however, that, if so, the cage-cup was still

[1] *Remains of Pagan Saxondom* (London, 1855), p. 28, pl. xiii.

[2] D. B. Harden, 'Glass Vessels in Anglo-Saxon Britain', *Arch. News Letter*, July 1950, p. 24; *id.* 'Glass Vessels in Britain and Ireland, A.D. 400–1000', in *Dark-Age Britain: Studies presented to E. T. Leeds* (1956), pp. 141 f.

[3] E. T. Leeds, *Early Anglo-Saxon Art and Archaeology* (1936), p. 77: J. Werner 'Italisches und koptisches Bronzegeschirr des 6. und 7. Jahrhunderts nordwärts der Alpen', in *Mnemosynon Theodor Wiegand* (Munich, 1938), pp. 74 ff., espec. p. 79.

[4] O. Wulff, *Altchristliche Bildwerke* (Berlin, 1909), no. 1022, pl. liv. Another is depicted on the Projecta casket (late fourth–early fifth century), O. M. Dalton, *Cat. Early Christian Antiqs. in B.M.* (1901), pl. xvi.

[5] A. O. Curle, *The Treasure of Traprain* (Glasgow, 1923), pp. 73 f., figs. 56–57, pl. xxviii; F. Drexel, 'Der Silberschatz von Traprain' in *Germania*, xi (1925), 128, fig. 6.

[6] *Germania*, xiii (1929), 196.

[7] *Antiq. Journ.* xxvi (1946), 17 f.; Harden, in *Dark-Age Britain*, pp. 143, 165.

[8] Fremersdorf, *op. cit.* (in note 1, p. 180), p. 299, note 5.

[9] F. Rademacher, *Bonner Jahrb.* cxlvii (1942), 305, discusses the type and says that it is only known from France and Belgium so far. He was unaware of the Westbere piece, which was not published till 1946.

remembered in the West when these imitations were being made, probably in north-French or Belgian glass-houses.

IV. THE FIGURE-DECORATION: ITS ARTISTIC AND ICONOGRAPHIC AFFINITIES

The Rothschild vase is distinguished from the great majority of its fellow cage-cups by the elaboration and artistic significance of its open-work design. Of the fifteen other surviving vessels or fragments known to us, which bear, or probably once bore, figured, or other than simple net-and-motto ornamentation (Appendix, Group A), three (A2, 3, and 8) are of particular iconographic interest.[1] The Cagnola cup (A2) of clear, colourless glass at Varese (pl. LXVI, *a*, *b*) carries a formal, widely spaced architectural scheme of two spirally and two vertically fluted columns, linked below by a circular 'stylobate' and above by a circular 'entablature' running across the tops of the fan-like capitals: in the centre of each of the four inter-columniations there dangles by a ribbon from this 'entablature' a tragic mask with triangular face, round eyes, huge, yawning mouth, and lank hair flapping out on either side against the column shafts. On the *situla* (pl. LXV) of transparent, pale-greenish glass in the Treasury of St. Mark, Venice (A3), the lower half of the vessel is enclosed in the usual network of regular rows of contiguous circles (type as Appendix, Group B), a motif strikingly illustrated by the cup at Trier (B9), recently discovered in a late-Roman sarcophagus at Niederemmel on the Mosel: the figured decoration of the *situla* is confined to the upper zone and shows a conventional hunting-scene, spirited and swiftly moving as a composition, if somewhat hard and crude in execution—a couple of mounted huntsmen, the one with flying cloak and brandishing a spear, the other turning back to wave to his companion, accompanied by two hounds overtaking their feline quarry, a spotted panther (?), or lion (?), and a striped tiger (?) respectively, while a tree suggests the rustic landscape. More spectacular than the Cagnola and Venice pieces is the fragmentary beaker found in the French excavations at Begram in Afghanistan (A8) and now in the Kabul Museum (pl. LXVIII, *a–c*). Its subject is drawn, like that of the Venice 'hunt' *situla*, from daily life, here the life of a busy sea-port. One side shows what may be one of the towers and part of the curtain-walls of harbour-defences, or, more probably, a representation of the famous *pharos* of Alexandria.[2] The masonry is solidly built of squared stone blocks: the tower has three tiers of two loophole windows and a door in its right side; and on top of the tower stands the naked figure of Neptune (?),[3] with oar, or rudder, in his left hand and a couple of very mutilated Tritons rolling at his feet, while his vanished right hand may have grasped a trident or sceptre. Apart from the curtain-wall, all these elements are featured in representations of the *pharos* in second-century A.D. Alexandrian coin-types (pl. LXVIII,

[1] For bibliographical and other details of examples cited in this section see Appendix, pp. 203 ff.

[2] See Kurz, *op. cit.* (in note 4, p. 181), pp. 101 f., after H. Seyrig in *Syria*, xxii (1941), 202 and Ch. Picard in *Bull. corresp. hellenique*, lxxvi (1952), 61 ff.

[3] See note 3, p. 206 for alternative identifications of the figure which stood on the Alexandrian *pharos*.

d).[1] On the other side we see, above, the delicately rendered sail, the mast, the steering-oar, and part of the poop of a ship, and a portion of a galley with two superimposed banks of oars, and, below, a man with a round cap paddling a dinghy. There is nothing in the figure-style of the Cagnola, Venice, and Begram pictorial pieces to suggest that any of them antedates the fourth century, though we have seen (p. 191) that external evidence may demand a closing date in the mid-third century for the Begram cache.

The Begram beaker offers the closest extant parallel to the subject of our study, since its external surface is wholly given over to a representational theme. But the Rothschild vase so far stands alone in combining with this glass-cutting technique, not merely some decorative or *genre* motifs, but a brilliantly conceived and fully preserved episode from classical mythology. From rim to base its surface is completely enveloped by a spreading, all-over, large-scale figure-pattern, a single, continuous scene presenting one of the most melodramatic moments in the Dionysiac repertory—the punishment of Lycurgus.[2]

The story as told on the vase corresponds in its essential features with the latest Hellenistic version of the myth followed by Nonnus in his *Dionysiaca* (*c.* A.D. 500). Lycurgus, king of the Thracian Edoni, a man of wild and violent temper, persecuted the Dionysiac *thiasos*. Towards the end of Book XX we learn of his driving Dionysus into the sea with an axe. Encouraged by this success, he seized his axe again, so we read at the opening of Book XXI, and rushed off into the forest to chase the Maenads. One of them, Ambrosia, in a fit of madness, snatched up a stone and hurled it at Lycurgus, knocking off his helmet. The king retaliated with a yet larger stone, and jagged at that, thrusting it at the Maenad and seizing her round the waist, with a view to her capture. But Ambrosia stood her ground: Lycurgus failed in his attempt to smash her skull; and she eluded his grasp, praying to Mother Earth to save her. Earth heard her, opened a gulf, and received her into her embrace. As Ambrosia disappeared, she changed herself into a plant and became a vine-shoot:

> εἰς φυτὸν εἶδος ἄμειψε καὶ ἀμπελόεις πέλεν ὄρπηξ (l. 29).

She then coiled herself as a winding cord about the neck of the king and sought to strangle him with a throttling noose, armed for the fray with threatening clusters, as once with the *thyrsus*:

> σειρὴν δ' αὐτὸ ἑλικτὸν ἐπιπλέξασα Λυκούργῳ
> ἀγχονίῳ σφήκωσεν ὁμόζυγον αὐχένα δεσμῷ,
> μαρναμένη μετὰ θύρσον ἀπειλητῆρι κορύμβῳ (ll. 30–2).

Earth, to do favour to Dionysus, king of garden-vines, gave the plant a voice; and Ambrosia laughed aloud, mocking Lycurgus and swearing that she would vanquish him and choke him with the indissoluble bonds of her leaves:

> ἀλύτοις σε περισφίγξαιμι πετήλοις (l. 38).

Whereupon Lycurgus was caught in the fetters of the vine, roaring defiance at

[1] From originals in the Heberden Coin Room, Ashmolean Museum, kindly chosen for us by Dr. C. M. Kraay.

[2] For other (mainly fragmentary) examples of open-work *diatreta* with pictorial designs see Appendix, Group A, 4–7, 9–15.

Dionysus, but unable to escape; and his voice could find no passage through the smothering tendrils, while the Bacchic women thronged round to torment him:

καὶ χλοεροῖς δεσμοῖσι κατάσχετος ἄγριος ἀνὴρ
ἀρραγέων ἀτίνακτος ἀλυκτοπέδῃσι πετήλων
ἀμφιπαγὴς ἀλάλαζεν ἀπειλείων Διονύσῳ.
οὐδὲ φυγεῖν σθένος εἶχε, μάτην δ' ἐτίνασσεν ἀνάγκῃ
οὐτιδαναῖς ἑλίκεσσι περίπλοκον ἀνθερεῶνα.
οὐδὲ δι' ἀσφαράγοιο μέση πορθμεύετο φωνὴ
θλιβομένου στεφανηδόν· ἐκυκλώσαντο δὲ Βάκχαι
αὐχένα μιτρωθέντα μέσον πνικτῆρι κορύμβῳ (ll. 55–62).[1]

The scene on the vase contains three successive moments in the episode, shown simultaneously. Ambrosia is still above ground, supplicating Mother Earth. But the vine into which she was changed has already sprouted into a spreading tree, in the branches of which Lycurgus is inextricably entangled; and the Dionysiac *thiasos*, here composed, not of Maenads, but of the god himself, his panther, a Pan, and a Satyr, has arrived and begun to exact its vengeance.

The design is focused upon the chief *dramatis persona*, Lycurgus himself, struggling in the grip of the vine; on him all the other figures in the scene converge (pl. LIX). He stands towards the front, head and body frontal, legs in profile, completely naked except for leather boots, which cover ankle, heel, and most of the foot, leaving the toes exposed. His head and body form a diagonal line slanting across the vase from rim to base. The left leg is extended stiffly towards the spectator's right, while the right knee is bent; and the weight of the body is supported partly by the right leg and partly by the vine, through which he appears to be falling. The plant—one can almost see it growing—has already chained the king round waist and thighs and is sending up branches to bind his wrists and arms. Lycurgus's arms are extended laterally on either side: the lowered right hand clutches feverishly at a vine-branch, the palm of the raised left hand is opened outwards. The thick hair is matted with sweat, the beard and moustache are unkempt and wild. The anguished expression of the upturned face, with furrowed brow, staring eyes, and lips parted in terror and agony, recalls the Laocoon and the wounded and dying giants of the Pergamene frieze or, more proximately, vanquished barbarians on the great historical reliefs and battle-sarcophagi of the second century of our era. The rolls of flesh round the neck and powerful muscles of arms, trunk, and legs, suggest brutal but unavailing strength. Lycurgus's axe, a single-bladed one, has slipped from his grasp and falls headlong, the blade being visible behind the left foot (pl. LXIV). The vine-tree shoots up from two roots, one between the king's legs, the other (the lower part of its stem is broken away) to the left of him, near the feet of Ambrosia, who is outstretched on the ground towards the right (pl. LX). The Maenad supports herself on her right arm and raises her left hand in supplication. She is naked save for a *himation* wrapped across her legs. Her hair is long and dishevelled; and her lips are parted as she cries for succour

[1] 'And the wild man, caught in the green bonds, immovable, imprisoned by the fetters of the leaves he could not rend, roared defiance at Dionysus. He had no strength to escape; and in vain he shook his throat, choked perforce by tiny tendrils. His voice could ferry no passage through his gullet, throttled with wreathing foliage. The Bacchant women closed in a circle around him, whose neck was wound round with stifling clusters.'

(or mocks her enemy). A large part of the vine on the left of Lycurgus, below the rim of the vase, is missing.

On the left the scene closes with the standing figure of a Satyr, who faces to right (pls. LX–LXI). The head and legs are in profile, while the trunk is wrenched round to give a practically frontal view. He has a thick thatch of hair and pointed ears, wears a loin-cloth, and balances himself on tip-toe on his left leg, the right leg being kicked out behind him, at right-angles to his body, to serve as a counterpoise, as he swings a mighty stone in his upraised right hand. This missile he aims at the head of the helpless prisoner, while a roar of mingled hatred and triumph issues from his widely opened mouth. In his left hand he grasps a strongly notched *pedum*.[1] Across the Satyr's right ankle falls the sash of the double-knobbed *thyrsus* (pl. LXI), held by Dionysus, who stands back to back with him and terminates the scene on the right.

The god (pl. LXII) holds himself erect and tense, his body turned three-quarters towards the left, while head and legs are in profile. The lower part of the left leg has been broken away. His agitation can be read in the tip-toe stance, the slightly forward bend of the whole figure, the outstretched right hand, with pointing fingers, the nervous grip of the left hand on the *thyrsus* held horizontally across the abdomen, the gaping mouth, and the vehement upward and downward swing of the ends of the cloak. A scarf-like *mitra* is bound tightly round the head, secured by a knot over the left temple, and surmounted by an aigrette (?) above the brow. Under his cloak he wears a diaphanous tunic, and his feet are shod in boots similar to those worn by Lycurgus. It is clear that the god is using very strong language indeed—either hurling abuse, as he points accusingly at his victim, or shouting orders to his henchman, the horned and bearded Pan, who bounds through the air on his left towards the king (pl. LXIII). Pan's trunk and extended arms are frontal, head and legs in profile. Facing to the right, he takes his cue from his leader. In his left hand he clutches his only garment, a twist of flying drapery. The smooth flesh offers an effective contrast to the animal shagginess of hair, moustache, beard, and thighs. The ends of both horns have been snapped off. Below Pan stands to the left Dionysus's spotted panther, now bereft of its maw (pls. LXII–LXIV), with legs and body strained taut for the spring and sturdy, rope-like tail curled upwards, over its back, against one end of its master's *thyrsus*. This completes the circuit of the vase.

The combination of figures and motifs which we have been describing cannot be precisely paralleled in any other rendering of the tale known to us.[2] The artist has

[1] The *pedum* surely rules out the suggestion of E. Coche de la Ferté (*op. cit.* (in note 1, p. 180), p. 137) that this figure represents Melicertes. Satyrs are occasionally partly draped.

[2] Lists, discussions, and illustrations of other representations of the story of Lycurgus in ancient arts are to be found in:

J. Roulez, 'Lycurgue furieux', *Ann. dell'Inst.* xvii (1845), 111 ff. and *Mon. dell'Inst.* iv, pl. 16; A. Michaelis, 'Licurgo furente sopra un'anfora di marmo', *Ann. dell'Inst.* xliv (1872), 248 ff. and *Mon. dell'Inst.* ix, pl. 45; W. H. Roscher, *Ausführliches Lexicon der griechischen und römischen Mythologie*, ii (1890–1), coll. 2191 ff.; Marbach, *s.v.* 'Lykurgus' in Pauly-Wissowa, *Realencyclopädie der classischen Altertumswissenschaft*, xiii (1927), coll. 2439 ff.; E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), pp. 139–50. (We are by no means certain that C.'s identification as Lycurgus of the axe-bearing figure on the Boston cornelian (*op. cit.* p. 144, fig. 14) is correct: it might, in that context, be Vulcan returning to Olympus, the vine-stock representing Dionysus. Nor are we wholly convinced by Ch. Picard's interpretation of two scenes on the frieze of the temple of Bacchus at Baalbek as depicting the story of Lycurgus and Ambrosia (*Mélanges R. Dussaud*, i (1939), 319–43)).

For further references see D. Levi, *Antioch Mosaic*

chosen the poignant moment when Lycurgus realized that the plant had mastered him and let the axe slip from his grasp. Only two other versions of this stage in the story come to mind, and in both of these the king is solitary, neither Dionysus nor the Bacchic *thiasos* being included in the picture. One is a third-century A.D. mosaic panel from the House of the Boat of Psyches at Antioch-on-the-Orontes.[1] Lycurgus, wearing belt and cloak and characterized by unkempt hair and beard, stands enmeshed in the vine, his left knee propped on a rock on the right. On the right also is seen his *bipennis* sliding head first to the ground from his grasp, while the handle collides with the rock as it falls. A now fragmentary panther, with long tail held erect, bounds towards him from the left.[2] Two Alexandrian bronze coin-types of Antoninus Pius depict a similar motif—Lycurgus, entrapped by the vine, standing to the right, with head thrown back and anguished upward gaze, while between his legs the *bipennis* glides earthward.[3] A third Alexandrian coin-type of the same emperor may portray the same theme in a slightly earlier moment: Lycurgus (?) standing to the left between two vine-trees, is already desperate, but has not as yet abandoned his axe, with which he hacks away at the encroaching branches; and a panther (?) leaps to attack him from the left.[4]

Yet a fourth Alexandrian coin-type of Pius shows the stage in the story which most Roman-age artists preferred to render: Lycurgus, although partly engulfed by the branches, is still confident, strides boldly forward, and swings above his head the murderous axe, aimed at Ambrosia, who crouches at his feet.[5] Occasionally the artist shows the axe in action, but omits the target, as on one side of a sculptured block, found during the Belgian excavations at Apameia,[6] which shows Lycurgus lifted right off his feet by two great, enveloping vine-branches, springing from a single stalk, while two other sides of the block are carved respectively with the figure of a *thyrsus*-bearing Silenus (?) and the figure of a Maenad beating a *tympanum*;[7] on a Berlin cornelian;[8] and in the well-known mosaic from Ste. Colombe, where Lycurgus, a lonely figure at the centre of a luxuriantly spreading vine-scroll, strides in fury towards the left, with his *bipennis* held vertically behind his back before being swung violently forward.[9]

Pavements (1947), i, 178 ff. Levi (*op. cit.* p. 181) mentions our vase, but does not realize that it is now in Lord Rothschild's possession; and he erroneously (see references in note 1, p. 180, above) describes it as 'never reproduced'.

[1] Levi, *op. cit.* ii, pl. 58*a*.

[2] This is a detail which seems to have escaped Levi's notice.

[3] *Journ. internat. d'arch. num.* 1898, p. 233, figs. 1, 2; J. G. Milne, 'Pictorial coin-types of the Roman Mint of Alexandria', in *Journ. Egypt. Arch.* xxix (1943), 63, pl. 4, no. 10. 18th year of Pius. Two examples of this type were acquired by the Ashmolean Museum, Oxford, after the publication of J. G. Milne's *Catalogue of Alexandrian Coins in the Ashmolean Museum* (1933). Cf. E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 147, fig. 18, *b–d*.

[4] *Journ. internat. d'arch. num.* 1898, p. 233, fig. 3; Milne, *Journ. Egypt. Arch.* xxix. 63. 8th year of Pius. Milne interprets the figure as a 'vine-dresser' in an astronomical type, but the movement would seem to be too much agitated for this. According to *B.M. Catalogue of Greek Coins of Alexandria* (1892), p. 123, no. 1056, pl. 6, the type represents Herakles cutting the vines of Syleus, but against this must be set again the agitated movement and the absence of any of Herakles's distinctive attributes.

[5] *Journ. internat. d'arch. num.* 1899, p. 71, fig. 3; Levi, *op. cit.* (in note 2, p. 196), i. 181, fig. 68. Cf. E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 147, fig. 17 and fig. 18*a*.

[6] *Compt.-rend. acad. inscr.* 1932, p. 126.

[7] F. Mayence, *Bulletin des musées royaux d'art et d'histoire*, v, 3 (1933), 53, figs. 4, 6; *Mélanges René Dussaud*, ii (1939), 975–9, pls. 1, 2. We prefer the interpretation given in the text of the two figures associated with Lycurgus to that of Mayence, who describes them as Dionysus and Ambrosia.

[8] A. Fürtwangler, *Beschreibung der geschnittenen Steine im Antiquarium* (Berlin, 1896), no. 3098, p. 26.

[9] S. Reinach, *Rép. de peint. grec. et rom.* (1922), p. 194,

A painting from the Vicolo del Panattiere, Pompeii,[1] and three mosaics from Djemila-Cuicul (Algeria),[2] Narbonne,[3] and Herculaneum[4] respectively, all show the same general scheme—on the left, Lycurgus lunging forward and about to bring his axe down on Ambrosia, who is prostrate or crouching on the ground on the right, while the vine appears in various stages of growth. In the Pompeian painting a tiny *putto* is oddly introduced on either side of Ambrosia. In the Algerian mosaic the vine branches are seen just sprouting from her neck. In the Narbonne mosaic Lycurgus is beardless and affects a peculiarly brutal cast of countenance and Ambrosia seems to be floating just above ground level. The Herculaneum mosaic introduces further details: Ambrosia's legs have vanished into the gulf opened for her by Mother Earth; and behind her stands Dionysus,[5] fully draped, wreathed, and *thyrsus*-bearing, not ranting, as on the Rothschild vase, but dignified and calm, yet with his hand outstretched as though in protest, while his panther launches an attack on Lycurgus's right calf.

A similar group of Lycurgus and Ambrosia occupies the centre of the frieze on the Borghese sarcophagus, now in the Villa Taverna at Frascati, a work of the second century A.D.[6] The connexion with the story of the figures on the left is not immediately obvious, apart from the panther (?), which stands to attention, watching its chance to worry the king. But on the right is a group of mildly interested onlookers—Earth seated on the ground with fruits in her *kolpos*; a Maenad standing beside Ambrosia with drawn sword; Dionysus, naked and wreathed, *thyrsus* in hand, leaning backwards as he stands, as though somewhat uncertain of his balance, while a Silenus supports him; a Pan with an amphora and a Satyr with a *pedum* closing the scene on the right. This relief, including Earth and the full Bacchic *thiasos*, is the most extensive certain rendering of the story so far known in Roman-age art. But it lacks the unity and dramatic fury of the rendering on the Rothschild vase. The right-hand group resembles a troupe of actors assembled off-stage, but not yet playing their parts.

Much more dramatic than, and very nearly as extensive as, the Frascati rendering is the most recent addition to the Lycurgus repertory, a portion of the vast expanse of mosaic carpet uncovered in the great fourth-century villa at Piazza Armerina in central Sicily (pl. LXXII).[7] This semicircular picture, filling the right-hand apse of the *triclinium*, again reproduces the Roman-age artists' favourite version of the myth—Lycurgus frenziedly brandishing his *bipennis* at Ambrosia, once more in the

fig. 6; *Inv. mos. Gaule*, i (1909), no. 236; Levi, *op. cit.* (in note 2, p. 196), i, 511, fig. 188; E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 143, fig. 13. A fragment of a relief in the Lateran Museum shows the head and shoulders of Lycurgus wielding the *bipennis* among vine-tendrils (R. Garrucci, *Monumenti del Museo Lateranense* (1861), p. 83, pl. 44, fig. 2): there is no means of knowing whether Ambrosia was originally included in this picture.

[1] Reinach, *op. cit.* (in previous note), p. 194, fig. 5; *Arch. Zeit.* xxvii (1869), pl. 21, fig. 2.

[2] *Mon. Piot*, xxxv (1935–6), 141, fig. 1, p. 163, fig. 6; L. Leschi, *Djemila, antique Cuicul* (1949), p. 46.

[3] Reinach, *op. cit.* (in note 9, p. 197), p. 194, fig. 4; *Inv. mos. Gaule*, i (1909), no. 361; E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 140, fig. 8.

[4] Reinach, *op. cit.* (in note 9, p. 197), p. 194, fig. 3; *Arch. Zeit.* xxvii (1869), pl. 21, fig. 3; *Jahr. deutsch. arch. Inst.* xxxii (1917), 36, fig. 13; M. Bieber, *A History of the Greek and Roman Theatre* (1939), p. 42, fig. 48; E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 141, fig. 9.

[5] This is not a female figure, a Maenad, as E. Coche de la Ferté (*op. cit.* (in note 1, p. 180), p. 140) holds.

[6] Roscher, *op. cit.* (in note 2, p. 196), coll. 2201–2, fig. 4; F. Matz and F. von Duhn, *Antike Bildwerke in Rom*, ii (1881), 444, no. 2269.

[7] From a photograph acquired from Vasari, Rome, through Mrs. F. Bonajuto, formerly of the British School at Rome.

presence of Dionysus and of his *thiasos* assembled in full force, but with Earth herself excluded from the action. The king, a powerful, muscular figure, naked but for boots and a circlet in his hair, strides towards the right. Ambrosia, a massively built, full-breasted woman, crouches to the right of him, half-draped, grape-crowned, and wearing a heavy necklace, and turns back to contemplate her would-be murderer, silent and serene, almost detached in expression, as though assured that he will never touch her. Her right hand is raised, either mechanically warding off the king's assault, or in wonderment. For her legs have already hardened into sturdy vine-stocks, from which two great branches have lashed themselves around Lycurgus's legs, climbing as high as his waist-line. Other branches have thrown off an elegant vine-scroll, which has run along the whole length of the bottom of the picture and twirled itself into roundels, each occupied by a winged *putto*, squatting, harvesting grapes, or sporting excitedly. These *putti* have, it seems, joined the Bacchic *thiasos* and may help to explain the two *putti* in the Pompeian painting cited above. At the back of Ambrosia are two figures in two receding planes, one behind the other. First comes Pan, whose bearded face, shaggy thighs, and flying *nebris* can be distinguished; and behind him is Dionysus, of whose head nothing remains but the end of a flowing beard, and who is clad in a long, white tunic, to which four vertical black stripes, two on either side of the body, are applied, while four black bands encircle the long, tight-fitting sleeves at the wrists. The god's right hand is extended in a gesture of eager protest. On the extreme right there emerge, out of the void left by a break in the mosaic, parts of the vine-wreathed brow and thrusting hands of a Silenus (?), bent on rescuing the Maenad. Lycurgus is glancing back at a formidable trio of Ambrosia's fellow Maenads, who attack from the left. The foremost of them has grabbed his shoulder, to hold him secure while she drives into his back her *thyrsus*, poised horizontally, lance-like. All three wear long, slipped tunics, wreaths, necklets, armlets, and bracelets. Below them, near the bottom of the picture, a youthful Satyr (?), with a wreath in his hair and a panther-skin flapping on his back, bends down and casts his arm about the back of a large, snarling panther, egging it on to close with Lycurgus. Wavy lines suggesting rocks and sketchy trees fill in the background. The vivid movement of the actors, the high emotional content, and the compositional scheme, with the protagonists splitting the *thiasos* into two flanking groups, match the less detailed, but no less impassioned and roughly contemporary, version of the Rothschild vase.[1]

Style matches technique in support of a fourth- or fifth-century dating of the Rothschild vase. Not so long ago the plasticity, realism, and liveliness of the carving might have been held to stamp the vessel as the product of a considerably earlier age.[2]

[1] *Bollettino d'Arte*, xxxvii (1952), 35–36, figs. 7, 8; B. Pace, *I mosaici di Piazza Armerina* (1955), p. 48, fig. 8. The Piazza Armerina discovery confirms the identification as Ambrosia and Dionysus of two figures, of which only the lower parts remain, in a painting recently uncovered at Stabiae (*Bollettino d'Arte*, xxxvi (1951), 44, and 41, fig. 3). The crouching, half-draped woman on the left is Ambrosia, the standing figure on the right is Dionysus, wearing a long robe. As G. V. Gentili suggests (*Bollettino d'Arte*, xxxvii (1952), 36), the two hands emerging from the gap on the left and resting on Ambrosia's body may well be those, not of Lycurgus, but of a rescuing Silenus.

[2] See Dillon, *op. cit.* (in note 1, p. 180), p. 73, note 1: 'The spirited execution would seem to point to a date hardly much later than the beginning of the third century.' Cf. the silver-gilt *patera* from Parabiago in the Brera Gallery, Milan, dated at the time of its discovery to the second century A.D. (A. Levi, 'La patera di Parabiago,' *Opere d'Arte*, v (1935), 21), but now established beyond all doubt as a work of the fourth century (A. Alföldi, *Atlantis*, 1949, pp. 68 ff.).

But numerous detailed studies, published during recent years, of late-antique sarcophagi, paintings, and mosaics and, above all, of the so-called 'minor' works, the ivory diptychs, cameos, contorniates, and decorated silver vessels, have laid the foundations of a more exact and penetrating stylistic analysis. On the one hand, they have emphasized the strength and tenacity of classical naturalism and representational art-traditions prevailing until at least as late as the early decades of the fifth century, alongside the formal, hieratic, transcendental manner manifested in state reliefs, in officially sponsored coin- and medallion-types, and in official, or officially inspired, large-scale portraits. The extraordinary naturalism of the possibly late-fifth-century mosaics in the Great Byzantine Palace at Istanbul is by now a commonplace.[1] On the other hand, students have learnt to expect, in works of this date, some strange surprises—remarkably able, graceful and attractive renderings, or adaptations, genuinely classical in flavour, of earlier models combined with clumsiness and awkwardness in execution, with omissions and misunderstandings and downright errors in drawing. So, too, on the Rothschild vase one can detect the unmistakable marks of lateness—a certain stiffness and heaviness in the proportions of the figures, the anatomical distortions brought about by over-abrupt transitions from profile to frontal views, faulty rendering of leg-muscles in the Satyr on the left, unconvincing drapery wrapped around Ambrosia's legs, exaggerated musculature in the case of Lycurgus, and the upward swing of Dionysus's cloak, expressive of his mood, but lacking rational explanation, since the god's static pose could not, of itself, have set it going. There is no sign here of hieratic frontality. The modelling is still, in the main, three-dimensional; and the over-all effect is definitely naturalistic. But the second-century artist's sureness of touch in draughtsmanship, and his feeling for the nuances of carefully graded planes in relief-work, have almost completely vanished.[2]

The intense expressionism of the faces is, at first sight, somewhat surprising in work of the late-antique period and might well engender initial doubts as to the vessel's ancient origin. Yet violent emotions were of the essence of the Lycurgus story; and it might well have been impossible to render them in this technique and medium without some almost unclassical exaggeration of accent. We are dealing here, after all, with a very rare form of figured relief-work, for which no fixed canons of artistic style can be formulated. In this matter of facial expression, the unagitated human figures on the Venice 'hunt' *situla* and Begram beaker do not offer parallels; and no comparisons can be drawn between the faces on the Rothschild vase and faces on a cage-glass vessel of the Renaissance or later periods, since no such post-Roman cage-glass exists (see above, p. 181).

The loss of technical power had already begun to show itself in the early decades of the third century. But the storms and crises of the middle and late third century

[1] G. Brett, 'The Mosaic of the Great Palace in Constantinople', *Journ. of the Warburg and Courtauld Institutes*, v (1942), 34 ff.; G. Brett, W. J. Macaulay, R. B. K. Stevenson, *The Great Palace of the Byzantine Emperors* (1947); *Illustr. Lond. News*, 13 Dec. 1952.

[2] The role of the Rothschild vase as a precursor of Byzantine art is hardly as significant as E. Coche de la Ferté (*op. cit.* (in note 1, p. 180), p. 160) believes. In the early years of the third-century Severan reliefs in Rome (*Papers British School at Rome*, xviii (1950), pl. 15) and at Lepcis Magna in Tripolitania (*ibid.* pls. 24, 25) had already anticipated the lace-like, black-and-white, all-over effect of such early Byzantine works as the two column-fragments at Istanbul (*Byz. Zeitschrift*, i (1892), pls. i, ii; cf. E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 159, fig. 28).

do not offer a probable context for the Rothschild vase. This is a typical fourth- or fifth-century luxury object, a fruit of the renaissance of connoisseurship and cultivated taste among the great Roman and Italian families and provincial aristocracies after the partial restoration, under Constantine's régime, of economic and social stability within the imperial frontiers. It belongs to the same artistic and literary milieu as do the decorated vessels with scenes from Greek mythology in the great fourth- and fifth-century silver treasures—the Corbridge *lanx*;[1] the Projecta casket[2] and Venus *trulla*[3] from the Esquiline, the Oceanus dish[4] and two Dionysiac platters[5] from Mildenhall, the Diana platter in Berlin,[6] the Concesti pieces,[7] and the Dionysiac flagon from Traprain Law.[8] Among other late renderings of scenes from the Dionysiac repertory are those on the ivory diptych at Sens,[9] on the engraved glass *stamnium* formerly in the Rheinisches Landesmuseum at Bonn, now at Mainz in the Altertumsmuseum (pl. LXXIII, *c*),[10] and on a second glass *situla*, of deep purplish-blue glass, in the Treasury of St. Mark, Venice, engraved on the outer surface with a broad facet-cut figure-frieze—a Satyr and a Pan each pursuing a Maenad, while Dionysus lounges naked against a pillar and is offered wine by a second Satyr and a third Maenad ranged on either side of him (pl. LXXI, *a–c*).[11] The general stylistic kinship of the Lycurgus scene on the Rothschild vase with these figure-designs is obvious. And there are detailed points of similarity, such as the likeness in pose of the leaping Pan (pl. LXXIII, *a*) and dancing Satyr (pl. LXXIII, *b*) on the Oceanus dish from Mildenhall to the Pan and Satyr of our vase.[12]

There is, however, among works of late-antique art one object, which, as a parallel to the Rothschild vase, stands in a class by itself. This is the Rubens vase (pl. LXXIV), once owned and drawn by Peter-Paul Rubens and acquired in 1941, after many vicissitudes, by the Walters Art Gallery, Baltimore.[13] It is a gently tapering, ovoid vessel with flanged base, over seven inches high and cut from a slightly irregular lump

[1] O. Brendel, *Journ. Rom. Stud.* xxxi (1941), 100 ff.

[2] O. M. Dalton, *Catalogue of Early Christian Antiquities in the British Museum* (1901), pp. 61 ff.

[3] P. Gusman, *L'Art décoratif de Rome*, i, pl. 26.

[4] J. W. Brailsford, *The Mildenhall Treasure: A Provisional Handbook* (1955), pl. 1.

[5] *Ibid.* pl. 2*a*.

[6] R. Zahn, *Amtliche Berichte aus der königl. Kunstsammlungen*, 38, no. 11 (Aug. 1917), pp. 296 ff.

[7] L. Matzulewitsch, *Byzantinische Antike* (1929), pls. 36–46.

[8] A. O. Curle, *The Treasure of Traprain* (1923), pp. 25 f., no. 7, fig. 8, pl. 11.

[9] R. Delbrück, *Die Consulardiptychen* (1929), pp. 232 ff., no. 61. Dated *c.* 450 (?).

[10] Kisa, *op. cit.* (in note 4, p. 179), pp. 661–2, fig. 245; Fremersdorf, *Figürliche geschliffene Gläser* (R.-G. Forschungen, vol. xix, 1951), pp. 8, 9, fig. 4, pls. 6, 7, 10, fig. 1: late-third-century. This vessel was found in the same grave as the network cage-cup at Mainz: see Appendix, B4. The photograph here reproduced was kindly provided by the Altertumsmuseum, Mainz.

[11] Kisa, *op. cit.* (in note 4, p. 179), pp. 677, 723, fig. 278 (very incorrect, after Deville); A. Pasini, *Il tesoro di S. Marco* (1885–6), pp. 100–1, pls. 53, 121; C. Albizzati, 'Quattro vasi romani nel tesoro di S. Marco' in *Memorie dell' Accad. pontificio Rom. di archeol.* i, 1 (1923), 51–62, pl. 3; Alinari photo, Venezia no. 38547. The photographs here reproduced are by Sig. O. Böhm, by courtesy of the authorities of the Cathedral of St. Mark. For a glass bottle and a glass beaker with mould-blown Dionysiac figures see G. Eisen, *Glass*, i, pls. 46–49. Eisen dates these to the first century A.D., but they are probably much later.

[12] The two-coned *thyrsus* held by Dionysus on the vase appears twice on the dish, and once on one of the platters, from Mildenhall: it also occurs on the Mainz *stamnium* and elsewhere. The photographs are reproduced here by courtesy of the Trustees of the British Museum.

[13] Burlington Fine Arts Club, *Ancient Greek Art* (1903), pp. 162–3, no. 88, pls. 106, 107 (exhibited as the Hamilton vase); M. C. Ross, *Journ. Walters Art Gallery*, vi (1943), 9–39; *Cat. Exhib. Early Christian and Byzantine Art, April 25–June 22, 1947*, Walters Art Gallery, Baltimore, p. 112, no. 543, pl. 76; Anon. *The Lycurgus Cup* (see note 5, p. 179), pl. 8. We have to thank the Director of the Walters Art Gallery for kindly supplying photographs of this vase, including the three from which pl. LXXIV is made.

of agate, which shades from a warm honey-colour to milky white. Front and back (pl. LXXIV, *a*) are relatively flat and carry a naturalistic vine with large leaves and heavy grape-clusters, while the two ends (pl. LXXIV, *b*) hunch themselves into shoulders, each formed by a handle-like knob carved with the head of a Pan cupped in acanthus. This decoration is, as in the case of that of the Rothschild vase, carved back from the surface. Its elements stand out in high relief and are sometimes deeply undercut. But here no bridges link free-standing leaves or branches with the walls of the vessel, which are extremely thin and translucent. Ross has marshalled convincing arguments against an early- or late-Renaissance dating of the piece and in favour of placing it in the fourth or fifth century of our era. There are, indeed, strong stylistic affinities between it and the Rothschild vase. Here, as there, the vine does not trace a closely knit pattern of balancing units. On the Rothschild vase the plant fits itself in where it can between the all-important figures. On the Rubens vase the vine, while holding the entire field on front and back, leaves empty, uneven spaces. On both vessels the grape-clusters are rendered by cross-hatchings and on both again the knotched branches are similarly treated, although the Rothschild vine carries no curling tendrils. Closely related, too, to the Rothschild Pan are the Rubens Pan-heads with their free-standing horns, coarse features, drooping goat-ears, and long moustaches. The most obvious difference between the two is in the handling of the vine-leaves, which on the Rothschild vase, being secondary, are small and somewhat summarily executed, while the large, exquisitely shaped, and delicately veined Rubens leaves attest the high degree of naturalism to which a late-antique craftsman could, on occasion, attain. But, in general, the kinship of the two vessels, both in technique and style, is so marked that one might almost describe the Rubens vase as a Bacchic cage-cup in precious stone. Besides these affinities with the Rothschild vase there is also an important parallelism between this vase and the Venice 'hunt' *situla* (Appendix, A3), for both have similar rosettes in relief on their bases (pl. LXXIV, *c* and note 3, p. 204).

The same decorative motifs—spreading vine-scroll, acanthus-leaves, and Pan-heads—appear on the Waddesdon vase (pl. LXXV, *a*, *b*) in the British Museum, another honey-coloured agate vessel, of elongated, ovoid shape, with Italian mounts of the sixteenth century.[1] There, however, the design is tamer and the undercutting of the ornament less daring. It may well be somewhat earlier than the Rubens vase and is technically less close than is the latter to the figured glass cage-cups.

Dionysiac themes of the type we have discussed stem straight from the pagan Hellenistic tradition and, above all, from the funerary art of the pagan empire, where they symbolize bliss in the Bacchic paradise and the after-life triumph of Dionysus's faithful initiates and worshippers over the forces of evil and death. The latter would be the lesson of the Lycurgus episode shown in a funerary context, as on the second-century A.D. Frascati sarcophagus.[2] It is, perhaps, unlikely that the Rothschild vase and other late-antique *de luxe* Dionysiac vessels of glass and silver were directly fashioned for sepulchral purposes. But they may well have been made, in the first

[1] C. H. Read, *The Waddesdon Bequest* (1902), p. 32, no. 68, pl. 17; Ross, *op. cit.* (in note 13, p. 201), pp. 31, 33, fig. 17. For the photographs we are much indebted to the Trustees of the British Museum.

[2] The mask-motif of the Cagnola cup, the hunting-motif of the Venice *situla*, and the harbour-motif of the Begram beaker are all well-known themes of sepulchral art.

instance, for ritual use in pagan circles still versed in this 'other-worldly' imagery. There is, however, no proof that they contributed to any pagan manifesto or campaign of anti-Christian propaganda. The owner of the Mildenhall Christian spoons clearly valued the pagan Oceanus dish and Bacchic platters as works of art or heirlooms; and in the case of the Esquiline hoard the mingling of pagan and Christian elements in the same family treasure, and even on one single object (the bridal casket), is notorious. In the fourth and fifth centuries there were several ways of interpreting such art-motifs as that of the Lycurgus story—as expressions of a definite religious cultus, as allegories of a vaguely and 'mystically' conceived hereafter, or as purely literary and aesthetic tributes to the time-honoured Graeco-Roman cultural heritage.[1]

APPENDIX

CATALOGUE OF EXTANT, OR LOST BUT WELL AUTHENTICATED, CAGE-CUPS AND FRAGMENTS

Previously, lists of cage-cups have been provided by several writers, notably Kisa[2] and Thorpe.[3] Our excuse for making one more list must be that we are in a position to add no less than fourteen pieces to the combined Kisa-Thorpe lists of twelve items. Kisa lists sixteen certain or possible cage-cups: but five of these (see below, Group C) must be disowned as being glasses with relief-cutting only. Thorpe lists eleven, omitting (strangely enough) the Rothschild vase itself, but adding the Vatican piece (A10 below). Our other main informant on extant cage-cups is Fremersdorf,[4] but his information is often so incidental and incomplete that it is not easy to discover how many cage-cups he then accepted as proven.

The present list is divided into three groups: (A) cage-cups with figured decoration; (B) cage-cups without figured decoration; (C) pieces not traceable, or wrongly ascribed to the cage-cup series by Kisa and other writers.

Group A. Cage-cups which have, or once had, figured decoration, with or without network and inscriptions

1. The 'Lycurgus' cup (pls. LIX–LXIV). Lord Rothschild collection, Cambridge. Said to be from Italy. Kisa, p. 612 (not p. 113, as wrongly cited by Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 133). For details and full description see pp. 181 ff., 193 ff.

2. The 'masks and columns' cup (pl. LXVI, *a*, *b*). Formerly in the Cagnola collection, Milan, now in Varese Museum. Said to be from Sardinia. H. 0·114 m. D. 0·136 m. Transparent colourless. No inscription.

Bell-shaped cup; complete. Below a splayed rim with a raised moulding at its neck is an openwork cage formed of four tragic masks between columns, the whole attached to the body by lenticular and V-shaped bridges. The vase stands on the lowest part of the cage, which is composed of a roughly circular ring of glass joining the bases of the columns and decorated with

[1] E. Coche de la Ferté is unlikely to win wide acceptance for his fanciful theory that the transformation of colour in the Rothschild glass, when viewed through transmitted light, from green to purple (see above, p. 188) was intended to produce a Bacchic 'miracle' of changing water into wine (*op. cit.* (in note 1, p. 180), pp. 160–2) For such a 'miracle' to be effective, the transformation would have had to come about only when the cup was filled with water. He also fails to note that the change of colour is not uniform, an amethystine purple replacing the wine colour where the yellower patch occurs on the vessel (see above, p. 187). In the two other known instances of glasses changing colour from opalescent buff to clear brown (see above, p. 188), such 'miracles' were clearly not in question.

[2] A. Kisa, *op. cit.* (in note 4, p. 179), pp. 606 ff.

[3] W. A. Thorpe, *op. cit.* (in note 4, p. 181), pp. 5 ff. (especially pp. 33 ff.).

[4] F. Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 295–300.

transverse nicks. At the top the capitals of the columns are joined together by another ring similarly nicked.

Kisa (no. 8), pp. 609, 629 ff., fig. 228; Thorpe (no. 3), p. 33. For a full description and bibliography with excellent illustrations, including a sectional drawing, see M. Bertolone, 'La tazza vitrea diatreta Cagnola', in *Riv. archeol. della antica Provincia e Diocesi di Como*, fasc. 128/9 (1947–8), 31 ff., figs. 1–5.[1]

3. The 'hunt' *situla* (pl. LXV, *a–d*). Treasury of St. Mark, Venice.[2] Provenience unknown. H. (without the ears) 0·265 m. D. 0·205 m. Transparent greenish, with silver-gilt handle. No inscription.

Bucket with tapering sides; nearly complete, some of network missing. Thickened rim decorated with sloping nicks, and with two diametrically opposed pierced 'ears' to hold the swinging handle, which is seemingly contemporary with the glass. Below this, a cage consisting of two friezes. The upper shows two huntsmen on horseback, one with a spear, the other apparently unarmed, in full gallop, hunting a tiger(?) and panther(?), respectively, with a hound which leaps in each case on the back of its quarry. The lower frieze is of the normal network pattern with four bands of circular (not hexagonal, as in Kisa's drawing) meshes. Below the friezes the cage ends and the vessel stands on a low circular plinth, which is not solid (though this is not clear from the published descriptions and photographs), but forms a raised base-ring. Underneath the base there is a cut design of a rosette with pointed petals.[3] The bridges on the upper frieze appear from the photographs to be thicker and more solid than on any other cage-cup; see, for example, the bridge which runs behind each horse from the buttocks to the neck, with a branch running down to the foreleg (pl. LXV).

Kisa (no. 7), pp. 609, 629 f., figs. 226–7; Thorpe (no. 2), p. 33. The best modern discussions with illustrations are by A. Pasini, *op. cit.* (in note 11, p. 201), pp. 99 f., pl. liii, 122, and C. Albizzati, *op. cit.* (in note 11, p. 201), pp. 46 ff., pl. ii: see also Dillon, *op. cit.* (in note 1, p. 180), p. 72, pl. xiv; H. Pierce and R. Tyler, *L'Art byzantin*, i (1932), 56, pl. 63; and Alinari photo, Venezia no. 38462.

4. The 'fishes and snails' cup (pl. LXVII, *a–c*). Hungarian Historical Museum, Budapest.[4] From Szekszárd (anc. Alisca), Hungary, found in a Christian sarcophagus, 1845. H. 0·12 m., D. 0·155 m.

Transparent greenish colourless. Inscription in Greek: ΛΕΙΒ[Ε Ω Π]ΟΙΜΕΝΙ ΠΙΕ ΖΗ[CΑ]ΙC (with leaf as stop-mark).

Hemispherical cup; nearly complete. Below a splayed rim with a raised moulding at its neck is the inscription in a band of independent letters in open-work. Below this is an overhanging flange, consisting of a frieze of leaves carved in open-work, resembling the ovolo border on a Samian bowl. Thereafter the vase contracts rapidly, and the base is decorated with three snails and three fishes carved in relief with hollow bodies, as Fremersdorf recognizes (not, as Kisa and Nagy claim, blown separately and fused on), for which the flange seems to form a sort of protecting border.

Kisa (no. 6), p. 609, figs. 229, 229 *a*; Thorpe (no. 6), p. 34. The early literature is cited by Kisa, *loc. cit.*; add now descriptions by F. Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 297 f. and L. Nagy (text in Hungarian) in his paper 'Vas diatretum aus Brigetio', in *Archaeologiai Értesítő*, xliv (1930), 116 ff., figs. 83–84.

[1] We are greatly obliged to Sig. Bertolone for his kindness in answering questions and supplying photographs and copies of his paper.

[2] We have to thank the authorities of the Cathedral for permission to publish the four fine photographs of this *situla* by Sig. O. Böhm, reproduced in pl. LXV.

[3] Albizzati (*loc. cit.*) describes the foot as a 'peducio anulare a listello', and the decoration on the base as 'un rosone a spicchi terminati ad angolo acuto'. We may compare the rosette on the base of the Rubens vase (see p. 202 and pl. LXXIV, *c*).

[4] We are greatly obliged to Dr. F. Fülep and Dr. A. Radnoti of the Hungarian Historical Museum for supplying us with the three photographs of this cup from which pl. LXVII, *a–c*, are reproduced, together with supplementary information about it and about nos. A5 and B8 below.

5. Fragment, from a vessel very similar to no. 4 (pl. LXIX, *d*). Hungarian Historical Museum, Budapest, no. 96. 1898. From County Fejér ('Fejérmegye', Nagy), W. of Budapest, Hungary. H. as extant 0·06 m. Transparent greenish colourless. Inscription probably in Latin: VIVA]S FELI[CITER.[1]

From a hemispherical cup (?). The fragment shows part of the rim, part of the inscriptional band and part of the overhanging flange, all of which resemble closely, both in shape and technique, the equivalent portions of no. 4; hence its insertion in this group, despite the lack of figures on the extant portion.

Kisa,[2] p. 610, fig. 230; Thorpe (no. 7), p. 34. The first publication is by J. Hampel in *Arch. Értesítő*, xix (1899), pp. 16 ff.; Fremersdorf and Nagy (*opp. citt.* under A4 above) also mention it and Nagy gives a good illustration.

6. The 'Dionysiac' fragment (pl. LXIX, *f*). Metropolitan Museum of Art, N.Y., no. 26.60.95, acquired in Rome, 1926. H. as extant 0·072 m. G.W. of fragment 0·076 m. Olive-green with milky weathering. No inscription.

FIG. 5. Three views of the 'tragic-mask' cage-cup fragment (A7) in the British Museum. Scale ½. From a drawing by Mr. C. O. Waterhouse.

Rim fragment from a bell-shaped cup (?). Rim slightly outsplayed with ground edge. Below this an overhanging frieze of leaves carved in open-work in ovolo formation as on A4 and 5 above; below, again, a design of which only the head and shoulders (back view) of a semi-nude male figure (? Dionysus or Satyr) facing left, with right arm (from which drapery hangs) upraised, together with the tag end of a garment of another Bacchic figure, are extant.

Illustrated, but not described, by Ray W. Smith, 'The significance of Roman glass', *Metrop. Mus. of Art Bulletin*, viii (1949), no. 2, p. 54.[3]

7. The 'tragic mask' fragment (fig. 5). British Museum, no. 1953.10–22.3. Provenience unknown. H. as extant 0·055 m. Depth of head (back to front) 0·035 m. T. of wall (inside of shell to outside of cage) 0·017 m. Colourless flashed with clear royal blue. No inscription extant.[4]

[1] Kisa read it in Greek as Π[ΙΕ ΖΗ]CEC, but Hampel read it in Latin as given here, and Nagy supports him, saying that the second letter is certainly F and not E, and the third letter shows clearly where the middle stroke, which would make it an E, has been broken off. Nagy says the L is also certain.

[2] Kisa only numbers the eight complete or nearly complete pieces.

[3] We are grateful to Mr. Ray Smith for drawing our attention to this fragment, and to Miss C. Alexander for supplying full details of it and the photograph from which pl. LXIX, *f*, is taken.

[4] Thanks are due to the Trustees of the British Museum for supplying the drawing by Mr. C. O. Waterhouse reproduced in fig. 5. There is a rim-fragment of a cup in the British Museum (1953.10–22.4), provenience unknown, of

Fragment of cup showing the head of an actor in side view to the left wearing a tragic mask, eyes and mouth pierced through, nose long and pointed, high wig with long side tresses, and behind, a bun of hair probably representing the actor's own hair under the mask. Head hollowed out from the right side from behind, seemingly by grinding (as on A1 in the figures of Ambrosia and the panther). The shell of the cup and the near (right) side of the head are colourless, the remainder is royal blue; the line of junction of the two colours bisects the nose and mouth.

Hitherto unpublished.

8. The 'harbour' beaker (pl. LXVIII, *a–c*). Kabul Museum. From Begram (anc. Kapiça), Afghanistan, 1937; found with some 186 other glasses in caches in adjoining rooms (nos. 10 and 13) in the palace.[1] H. of largest fragment 0·143 m. D. 0·115 m. Transparent colourless. No inscription.

Tall beaker with rounded (?) base; incomplete, in four main and some minor fragments.[2] Below a splayed rim there is a raised moulding and below this a figured design in open-work. The vase as now restored shows on one side (the largest fragment) Neptune (?),[3] flanked by Tritons, standing on a tower, probably the *pharos* of Alexandria, from which a town wall extends to the right; on the other side fall the other three main fragments showing, above, a sailing-boat and a galley with two banks of oars, and below, a fishing-skiff or dinghy being paddled by a male figure wearing a cap.

J. Hackin, *Recherches archéol. à Begram, chantier no. 2 (1937)* (Mem. délég. arch. franç. en Afghanistan, ix, Paris 1939), pp. 42 ff., nos. 203 *a–d*, pls. xvi–xvii, figs. 37–40 (showing the four main fragments separately); O. Kurz, *op. cit.* (in note 4, p. 181), pp. 101 f., figs. 359–62 (showing the vase as restored in Kabul); H. Seyrig, in *Syria*, xxii (1941), 202; Ch. Picard, in *Bull. corresp. hellénique*, lxxvi (1952), 61 ff.

9. Fragment from the same find-spot as no. 8. Kabul Museum. H. as extant 0·024 m. Transparent, colourless. Forepart of a wild animal (tiger or panther?) with forepaws extended. Thought by Hackin, *op. cit.* under A8, p. 43, no. 203 *e* (who does not illustrate it) not to be from the same vase as A8, but to be in the same technique.

10. Vatican Library Museum, no. 767 (pl. LXVI, *c*).[4] From the Catacombs, Rome (still partly embedded in mortar). H. as extant 0·085 m. G.D. 0·053 m. Originally colourless, but now opaque with milky-white weathering. No inscription.

Beaker; fragmentary. Rim missing, body ovoid with convex sides curving in towards rim and base. Small splayed pad-base (lower part missing); for the type, cp. Harden, *op. cit.* (in note 1, p. 191), pp. 138 ff., 149 ff., nos. 408–9, 419–20, pls. xv–xvi. On the body are three equidistant forked sprays of stylized corn-ears (?) pointing downwards, connected by thin rectangular bridges rising *c.* 4 mm. from the inner wall.

colourless glass with an inscribed band of letters in relief . .]CΠA[. . in deep blue, which might belong to the same vessel. But no other example is known of a cup with a caged body and raised, but not open-work, letters. We have, therefore, not accepted the two fragments as belonging together, although we feel bound to call attention to the similarity of metal and coloration. The consecutive accession numbers now attached to the two pieces are not significant, as they have both been in the Museum for a long time without receiving accession numbers.

[1] For a supplementary account of the find and for illustrations of many of the glasses see P. Hamelin's three articles in *Cahiers de Byrsa*, ii (1952), 11 ff.; iii (1953), 121 ff.; and iv (1954), 153 ff. We are obliged to Dr. O. Kurz and the Warburg Institute for the loan of photographs from which pl. LXVIII, *a*, *b* are taken.

[2] Some minor fragments were found after Hackin's first publication (Kurz, *op. cit.* (in note 4, p. 181), p. 101). The beaker has been restored in plaster in Kabul Museum and provided with a moulded foot such as it almost certainly never possessed.

[3] On representations of the *pharos* of Alexandria this figure has been variously identified as Neptune or Jupiter or a Ptolemy—see Kurz, *op. cit.* (in note 4, p. 181), p. 102. Yet we must confess that on this particular vase Neptune seems the most likely identification.

[4] The photograph here published was kindly provided by the Vatican Librarian, through Mrs. F. Bonajuto formerly of the British School at Rome.

Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 297, 299, notes 4 and 8, after whom Thorpe (no. 4), p. 33.

11. Altertumsmuseum, Mainz, no. 4483 (pl. LXIX, *c*; fig. 6, *a*). Provenience unknown. Dims. as extant 0·045 by 0·06 m. From a blank of colourless glass cased with a thin blue outer layer. No inscription.

Fragment of cup (?). Part of the cage and some bridges extant, but no part of inner body; probably from bottom of the vessel, the ring at the bottom being the edge on which the vessel

a *b*

FIG. 6. Fragments of cage-cups nos. A11 (in the Altertumsmuseum, Mainz) and A14 (in the R.-G. Zentralmuseum, Mainz). Scale ½. After drawings by Dr. W. von Pfeffer.

stood (cp. in general no. 2 above). Under surface of cage shows very clearly the marks of the cutting tool. The outer (blue) layer has cut design of sprays with oval holes reaching through to the colourless inner layer at intervals, to represent berries or flowers. T. (blue layer) ½ mm., T. (colourless layer) 1½ mm., H. of bridge 9 mm.

G. Behrens, *Mainzer Zeitschrift*, xx/xxi (1925–6), 76; Fremersdorf, *op. cit.* (in note 1, p. 180), p. 300, note 18. Neither describes the piece fully.[1]

12. Rheinisches Landesmuseum, Trier, no. 1696 (pl. LXIX, *g*). From Trier (Nikolausstraße), 1887. H. as extant 0·05 m. G.W. of frag. 0·07 m. Colourless with milky pitting weathering. No inscription.

Rim fragment from a bell-shaped cup (?). Rim slightly outsplayed with ground edge. Below this an overhanging flange of leaves carved in open-work, in ovolo formation; cp. A5 above, of which it is nearly a duplicate, with slight differences of detail.

S. Loeschcke, *Trierer Jahresberichte*, xiii (1921–2), pp. xxvi–xxvii; H. Eiden, *Trierer Zeitschrift*, xix (1950), 34, note 17. Neither Loeschcke nor Eiden gives a full description with illustration.

13. Reading Museum, Duke of Wellington loan (pl. LXIX, *h*).[2] From Silchester, Hants. Transparent, colourless. Dims. as extant 0·03 m. by 0·018 m. No inscription.

Shoulder fragment from a bell-shaped cup (?). Rim missing, but was outsplayed. Below, an open-work flange resembling those on A4, 5, and 12 above. The parallelism is not incontrovertible, but this is almost certainly a fragment of one of the cage-cups of this 'figured' group.

Hitherto unpublished.

14. Römisch-germanisches Zentralmuseum, Mainz, no. 0·22591 (pl. LXVII, *d*; fig. 6, *b*). Provenience unknown. Dims. as extant 0·055 m. by 0·042 m. From a blank of colourless glass

[1] We are deeply indebted to Dr. W. von Pfeffer of the Altertumsmuseum, who was preparing a publication of both this and A14, for kindly drawing our attention to these fragments (which neither of us has seen), supplying us with full details, photographs and drawings, and most generously ceding to us the privilege of publishing them.

[2] From a photograph by Mr. G. C. Boon, F.S.A., lately Assistant at the Reading Museum, by permission of the Director, Mr. W. A. Smallcombe.

cased with a thin bluish (?) outer layer. Glass heavily weathered with brownish and iridescent film and original colours difficult to decipher. No inscription.

Fragment of cup (?). Part of cage and inner body and one bridge extant. The only extant part of the design is the lower part of a bearded male face. T. of cage 2 mm. H. of bridge 9 mm. T. of inner wall 2 mm.

Previously unpublished; information kindly supplied by Dr. W. von Pfeffer (see note 1, p. 207).

15. Louvre Museum, MND 775 (pl. LXVI, *d*). From Cyzicus, Turkey. H. as extant 0·04 m. L. from tip to tip 0·097 m. From a blank of colourless glass cased with a blue outer layer. No inscription.

Fragment of side of cup round which runs a garland of stylized leaves horizontally. This garland is cut in the blue outer casing and is attached by a narrow continuous shank (also part of the blue outer casing) to the colourless inner portion, the junction between the blue and the colourless being near the bottom of the shank. Towards the bottom of the fragment are two broken 'knobs'—the remains of shanks for other portions of the open-work design.

E. Coche de la Ferté, *op. cit.* (in note 1, p. 180), p. 153 f., fig. 29.[1]

Group B. Cage-cups with network only, with or without inscriptions

1. Formerly in Berlin Museum, said to have been destroyed in 1945,[2] with rest of Berlin collection of ancient glass. From Benesisstr., Cologne, 1844, in a stone sarcophagus with a coin of Constantine II. H. *c.* 0·105 m. D. *c.* 0·085 m. Transparent, colourless. Inscription in Greek: ΠΙ]Ε ΖΗCΑΙC ΚΑΛΩ[C

Bell-shaped cup; nearly complete. Below a splayed rim with raised moulding at its neck is the inscription in a band of independent letters in open-work. Below this is a network cage consisting of two rows of circular meshes, with a central open-work pattern (? a single mesh) underneath, on which the vessel stood.

Kisa (no. 5), p. 608, fig. 220 (line drawing); Thorpe (no. 10), p. 34. The only photographic illustration appears to be in R. Schmidt, *Das Glas* (1922), fig. 12.

2. Antiquarium, Munich, no. 12.129 (pl. LXX, *a*, *b*).[3] A companion piece to no. 1, but larger, found at same time and place in a second stone sarcophagus with a coin of Trajan. H. 0·12 m. D. 0·10 m. Transparent, colourless. Inscription in Latin: BIBE MVLTIS ANNIS

Bell-shaped cup; complete. Shape and design as B 1.

Kisa (no. 4), pp. 608, 628, fig. 221: Thorpe (no. 11), p. 35, fig. 11.

3. Rijksmuseum van Oudheden, Leiden, no. K.1931/2.50C (Gildemeester bequest) (pl. LXIX, *e*). Said to be from Italy. H. as extant 0·052 m. Max. H. of cage from inner cup 6 mm. Max. H. of letters, 7 mm. Transparent, colourless body and network, and bridges for letters, deep purple letters. Inscription in Latin . . . .] BE [. . . . (for 'bibe'?).

Fragment of side only, with one letter and part of another, and traces of the top edge of the network.

Hitherto unpublished.[4]

4. Römisch-germanisches Museum, Mainz (the smaller portion formerly in Bonn, but

[1] We are much indebted to Mr. Coche de la Ferté for sending us full details and a photograph of this fragment.

[2] See H. Eiden in *Trierer Zeitschr.* xix (1950), 34, following F. Fremersdorf in *Köln 1900 Jahre Stadt* (1950), p. 24.

[3] Thanks are due to the Director of the Antiquarium and Dr. H. von Barloewen for supplying the new photographs of this vase that are here reproduced.

[4] We are grateful to Mr. Ray Smith for drawing our attention to this fragment, and to Dr. C. Kern for supplying full details of it, and the photograph.

transferred some years ago to join the larger).[1] From Hohensulzen (Rheinhessen), 1869, in a sarcophagus of red sandstone, with three other glasses. H. 0·15 m. D. 0·21 m. Transparent, colourless. No inscription.

Hemispherical cup; in two fragments, incomplete. Below a splayed rim with raised moulding at its neck the body and base of the vessel are covered by a network cage consisting of four rows of circular meshes with a central open-work 8-petalled rosette, on which the vessel stands.

Kisa (no. 3), pp. 608, 621, fig. 222 (showing smaller portion only, then in Bonn); Thorpe (no. 9), p. 34. For a good reconstruction on paper of the complete vessel with sections through the rim and base see G. Behrens, 'Röm. Gläser aus Rheinhessen' in *Mainzer Zeitsch.* xx/xxi (1925/6), 76 f., fig. 29.

For the other three vases from the same burial see Fremersdorf, *Figürliche geschliffene Gläser* (R.-G. Forschungen, vol. xix, 1951), pp. 8 f., pls. 6, 7, and 10, and fig. 4. These are: (*a*) a fine two-handled cylindrical flask with a facet-cut scene of Dionysus and his rout (see pl. LXXIII, *c* for unrolling of design); (*b*) another two-handled cylindrical flask with poor linear cutting in horizontal bands; (*c*) a pipette-shaped unguent-bottle. As Fremersdorf and others have recognized, these vases support a date *c.* A.D. 300 or a little later for the group; the pipette unguent-bottle is particularly characteristic of that age, both in the east and west of the Roman world.

5. Kunsthistorisches Museum, Vienna. From Daruvar, Slavonia, *c.* 1790.[2] H. *c.* 0·12 m. D. *c.* 0·09 m. Transparent, colourless. Inscription in Latin: . . . .]FAVENTIB[VS . . . .

Bell-shaped cup; fragmentary. Below a splayed rim with raised moulding at its neck is the inscription in a band of independent letters in open-work. Below this is a network cage consisting of three rows of circular meshes, with a central open-work pattern underneath, on which the vessel stands.

Kisa (no. 2), pp. 607, 620, 628, fig. 223; Thorpe (no. 5), p. 34. The first publication is in J. von Arneth, *Antiken Cameen des K. K. Munz.- und Antikenkab.* pl. 22, 3, with a good drawing; the only available photographic reproduction appears to be Kisa's.

6. Milan (Castello Sforzesco Arch. Mus.); formerly in the Visconti and Trivulzio collections. From Novara, Piedmont, 1725. H. 0·121 m. D. 0·123 m. Transparent, colourless inner cup, with light cobalt blue network and emerald green inscription. Inscription in Latin: BIBE VIVAS MVLTIS ANNIS

Bell-shaped cup; complete. Below a splayed rim with raised moulding at its neck is the inscription in a band of independent letters in open-work. Below this is a network cage consisting of four rows of circular meshes, with a central open-work pattern underneath, on which the vessel stands.

Kisa (no. 1), p. 607, fig. 224 (very inexact); Thorpe (no. 1), p. 33. The best publication is Bertolone's, *op. cit. s.v.* A2 above, who gives a good photograph, with drawing of the structural details and of the inscription (*ibid.* figs. 4–6).

7. British Museum, no. 1953.10–22.2 (pl. LXIX, *a*).[3] Provenience unknown. H. as extant 0·065 m. D. *c.* 0·08 m. Opalescent buff in aspect both on original surfaces and on fractures, except in transmitted light, when it appears a clear, deep amber. Inscription in Latin: . . . .]IVAS M[. . . ., perhaps to be restored as BIBE VIVAS MVLTIS ANNIS

Fragment from a bell-shaped cup, seemingly very similar in shape and design to B6 and perhaps a companion piece. Below a splayed rim with raised linear moulding at its neck is the

[1] We are informed by the Mainz Museum authorities that they have most unfortunately not been able to find either portion since the war.

[2] The information given by different writers about the date of its discovery and of its entry into the Vienna Museum is inconsistent. Kisa says it was bought by Chev. Bossi in 1790 in Daruvar, and we may assume that it was then a recent find.

[3] Photograph kindly supplied through Mr. R. A. Higgins and published here by kind permission of the Trustees.

inscription in a band of independent letters in open-work. Below this traces only of the top edge of a network cage of circular (?) meshes.

Encycl. Brit. 11th ed., art. *Glass*, pl. i, 3, opp. p. 98.

8. Budapest, formerly in Mrs. Tuszla's collection, later in Dr. Basch's collection, but not now with this collection, and presumably destroyed during the war. Found *c.* 1895–1900 in Öszöny village, at N. end of site of anc. Brigetio, Hungary. H. of larger (rim) fragment 0·08 m. Colourless with milky weathering. Inscription in Latin: . . . .]VASM[. . . . Perhaps VI]VAS M[VLTIS ANNIS as on B6. Nagy (see below), who read VASI instead of VASM, suggests VIVAS IN DEO or some similar phrase; but no other of these vessels is known to have carried a Christian inscription.

Hemispherical cup (?); two separate fragments of rim and upper part of body. Shape as nos. B1, 2, etc., above.

First and only publication is by L. Nagy, 'Vas diatretum aus Brigetio', in *Archaeologiai Értesítő*, xliv (1930), 111 ff., fig. 82, with photographs of each fragment.

9. Landesmuseum, Trier. From Niederemmel (Kr. Bernkastel), 1950. Found in no. III of a group of three sarcophagus burials with a clay *olla* and a glass pipette-shaped unguent-bottle. Burial no. I had no grave goods; burial no. II had a coin of Licinius of A.D. 313–17. H. 0·18 m. D. 0·155 m. Transparent, colourless with milky weathering. No inscription.

Tall bell-shaped cup; almost complete. Below a splayed rim with raised moulding at its neck the body and base of the vase is covered with a network cage consisting of six rows of circular meshes with a central open-work six-petalled rosette, on which the vessel stands.

First and best publication is by H. Eiden, 'Die Diatretglas aus einer spätrömischen Begräbnisstätte in Niederemmel an der Mosel', in *Trierer Zeitsch.* xix (1950), 26 ff., pls. i–ii, figs. 4–6, with full description, drawings, and photographs.

10. Formerly in Strasbourg: destroyed in 1870. From Strasbourg (Weissenburgertor), 1826, in a stone sarcophagus with a gold coin of Constans I. Dimensions unrecorded.[1] Colourless inner cup with milky weathering ('milchfärbiges Gefäss', Kisa), purple network, and emerald-green inscription. Inscription in Latin: . . MA]XIM[IA]NE AVGV[STE . .

Tall bell-shaped cup; nearly complete. Below a splayed rim with raised moulding at its neck was the inscription in a band of independent letters in open-work. Below this was a network cage consisting of four rows of circular meshes, with a central open-work pattern underneath, on which the vessel stood.

Kisa, pp. 614, 628, 954, fig. 225. Thorpe (no. 8), p. 34. For references to earlier publications see Kisa, p. 614, note 1.

11. Museo Arqueológico Nacional, Madrid, no. 21529 (pl. LXXI, *d*). From Soria (anc. Termancia).[2] H. as extant 0·20 m. D. 0·18 m. Greenish. No inscription.

Deep cup (?) with convex sides; fragmentary. At top a thick band-rim, with nicks on exterior, sloping partly to left and partly to right; direction of nicks changes at least twice, one of the changes occurring where (right-hand side in pl. LXXI, *d*) there is a broken excrescence, the purpose of which is not easy to explain.[3] Below, at short interval, a second raised band with chevron nicks pointing partly to right and partly to left; and at a further short interval a plain raised band from which depends a cage formed of five horizontal rows of circular meshes bounded below by a horizontal band nicked vertically at intervals. The bottom of the vase is missing and

[1] So F. Wieseler in *Bonner Jahrb.* lix (1876), 69, note 3.

[2] We are greatly indebted to Mr. A. Blanco, of Madrid, for answering inquiries about this cup and supplying the photograph of it.

[3] The rim, with its raised bands and nicking, is more akin to the Venice 'hunt' *situla* (A3) than to any in Group B (and cf. also the nicked bands on Group C5 below). The fragmentary excrescence on the rim might be part of an 'ear' to hold a swinging handle.

in the illustrations appears wrongly restored in plaster: it may originally have been in open-work with a convex bottom to the inner shell, as normally on these vases.[1]

R. Menendez Pidal, *Hist. de España*, ii (1955), p. 770, fig. 618: *Ars Hispaniae*, ii (1947), pp. 167–8, fig. 160.

Group C. Pieces which are not traceable, or have been wrongly listed as cage-cups by Kisa and other writers

1. Fragment in Berlin Museum inscribed . . . .] CEC [. . . . in high relief, colourless with azure-blue casing. No evidence of open-work cutting.

Kisa, pp. 611, 961; Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 297, col. 2 and 299, note 7.

2. Fragment in Terme Museum, Rome, inscribed . . . .] ИΞƆ [. . . . in high relief below an egg-moulding also in high relief. Violet. No evidence of open-work cutting.

Kisa, pp. 611, 932.

3. Fragment in Kunsthistorisches Museum, Vienna, inscribed . . . .] LLYR [. . . . in high relief. Colourless. From a bell-shaped beaker. No evidence of open-work cutting.

Kisa, pp. 610 f., fig. 231; Fremersdorf, *op. cit.* (in note 1, p. 180), p. 299, note 5.

4. Fragment in Österreichisches Museum, Vienna. Colourless with two azure-blue raised stripes. No evidence of open-work cutting.

Kisa, pp. 610, 620 f., fig. 232; Fremersdorf, *op. cit.* (in note 1, p. 180), pp. 297, and 299, note 7.

5. Flask in British Museum, from Melaten (nr. Cologne), formerly in the Disch collection. Colourless, upper part of neck missing; hole in body (due to devitrification). On body, in two horizontal bands between nicked bands,[2] an inscription in Greek: ΠΙΕ ZHCAIC AEI|| EN ΑΓΑΘΟΙC There is no attempt at anything more than relief cutting.

Kisa, pp. 611, 767; Dalton, *Cat. Early Christian Antiqs. in B.M.* p. 131, no. 653, and fig.

6. Cup allegedly found at Arles in 1872, which received mention in numerous publications at the time, including even CIL XII 5696, 1, in view of its alleged inscription DIVVS MAXIMIANVS AVGVSTVS. Kisa, and after him Fremersdorf, have concluded that the piece is a duplication of the lost Strasbourg cage-cup (B10 above), and we may concur. For further details and bibliography see Kisa, pp. 614 f., 963; Fremersdorf, *op. cit.* (in note 1, p. 180), p. 299, note 7.

7–11. Five alleged examples mentioned by earlier writers but which Kisa failed to trace. They are: (7) Maler collection, Rome: azure-blue network; (8) Novara 1680: azure-blue inscription BIBE DIV VIVAS; (9) Isola Farnese (anc. Veii): 'fragments of ancient diatreta' mentioned by Winckelmann; (10) (11) pieces in dealers' hands in Turin and Venice, respectively, mentioned by De Rossi. For fuller details of all these see Kisa, p. 615. It seems that nos. (7) and (8) might be duplications of the Novara cup (B6 above).

12–13. Two fragmentary examples may be referred to by G. Caputo in *Monumenti Antichi*, xli (1951), p. 399, in the following words:

> 'Per non averne trovato alcun esemplare trascuriamo di soffermarci sui vasi plastici, su quelli a mosaico, sugli altri a doppio strato colorato, sui *diatreta*, dei quali tuttavia la Tripolitania ha due frammenti di un magnifico campione, provenienti da Leptis Magna.'

Inquiries on the spot in Tripoli made for us by Mr. R. G. Goodchild, F.S.A., have failed to trace these 'due frammenti', if, in fact, they were from cage-cups.

[1] The convex sides seem to forbid restoring the piece with a bucket-base like that of the Venice 'hunt' *situla* (A3) despite the other similarities that it bears to that vessel.

[2] There is a family resemblance between these nicked bands and those on the Venice 'hunt' *situla* (A3) and the Soria cup (B11).

SUMMARY

From these three lists it will be seen that there are twenty-six true cage-cups or fragments known, while thirteen pieces, formerly listed as cage-cups, must be removed from the list, at least temporarily.

POSTSCRIPT

While this paper was in proof an article by Dr. Fritz Fremersdorf ('Wie wurden die römischen Diatretgläser hergestellt? Eine Entgegung', *Kölner Jahrbuch für Vor- und Frühgeschichte*, ii (1956), 27 ff.) has appeared which in our view firmly and finally demolishes Dr. Wiedmann's theories (see p. 182, note 1) of how the cage-cups were made, and makes clear, with excellent photographs showing details of the Venice 'hunt' *situla*, the Leiden fragment and others, that they must have been cut and ground from a solid blank in view of the marks of a grinding-wheel that appear all over the upper surface of the inner cup, the under surface of the outer cage, and the sides of the bridges. This was the explanation propounded by Fremersdorf in 1930, and readily accepted by us (p. 182) on the basis of our own study of the group as a whole. We are glad that Fremersdorf's views and ours are in full accord and we hope that no more will be heard of Wiedmann's theories, which, in any case, could only have applied to the net-work group and not to the figured cups.

Dr. Fremersdorf in this article also illustrates (*ibid.* pl. xxiv, 3) a hitherto unpublished fragment of a cage-cup from Cologne (Niessen collection 6211) which had escaped our attention. It belongs to the class with figured scenes and net decoration, but the figured part is in relief only, not cage-cut, and depicts a nude female figure leaning on a couchant lioness. Below this are the stubs of the topmost bridges of the net-work pattern. The figures are blue, the remainder colourless. Fremersdorf (in a letter to D. B. H.) expresses his belief that the fragment comes from an unfinished vessel: the colourless layer beneath the figures is 7·5–8·5 mm. thick and could readily have been cage-cut, like the figured portion of the Venice 'hunt' *situla*. We are grateful to him for these comments.

A second omission from our lists, kindly drawn to our attention by Dr. T. E. Haevernick of Mainz, is a rim fragment of a net-work cage-cup of group B, which is similar in colour, Dr. Haevernick says, to the British Museum fragment, B7. It was found at Salona and is now in the museum at Split.

Thirdly, by the kindness of Miss Dorothy Charlesworth and of the excavator, Mr. E. Greenfield, we are permitted to record that a small fragment of one ring of a colourless cage-cup of Group B was found recently during excavations at Great Staughton, Huntingdonshire, in a stratum dated by coin finds to the third quarter of the fourth century A.D.—a welcome confirmation of the dating evidence cited above.

The Lycurgus Cup, view A—Lycurgus engulfed in the vine. Scale $\frac{1}{1}$. After *The Lycurgus Cup* (ed. Lord Rothschild), by courtesy

Photo. Edward Leigh

The Lycurgus Cup, view B —Satyr, Ambrosia, and Lycurgus. Scale $\frac{1}{1}$. After *The Lycurgus Cup* (ed. Lord Rothschild), by courtesy

Photo. Edward Leigh

The Lycurgus Cup, view C—Dionysus, Satyr, Ambrosia. Scale $\frac{1}{1}$. After *The Lycurgus Cup* (ed. Lord Rothschild), by courtesy

Photo. Edward Leigh

The Lycurgus Cup, view D—Panther, Dionysus. Scale $\frac{1}{1}$. After *The Lycurgus Cup* (ed. Lord Rothschild), by courtesy

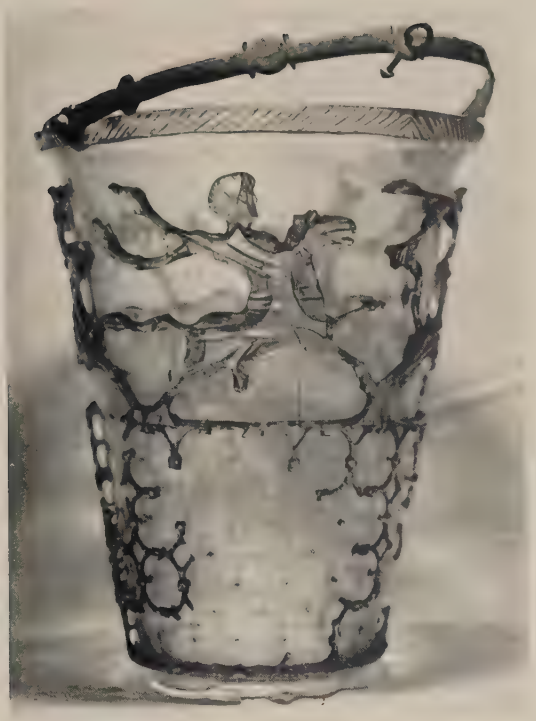
Photo. Edward Leigh

The Lycurgus Cup, view E—Pan, Panther. Scale $\frac{1}{1}$. After *The Lycurgus Cup* (ed. Lord Rothschild), by courtesy

Photo. Edward Leigh

The Lycurgus Cup, view F—Lycurgus, Pan, Panther. Scale $\frac{1}{1}$. After *The Lycurgus Cup* (ed. Lord Rothschild), by courtesy

Photo. Edward Leigh



a.

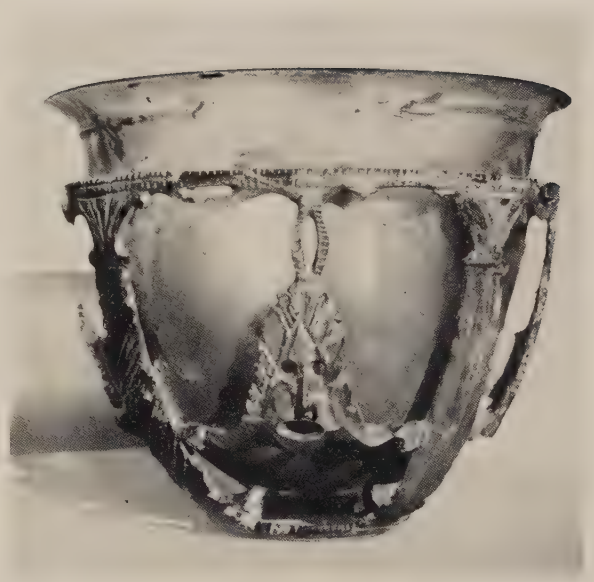
b.

c.

d.

Four views of the 'hunt' *situla* (see Appendix, A 3, p. 204) in the Treasury of St. Mark, Venice. Scale $\frac{1}{3}$

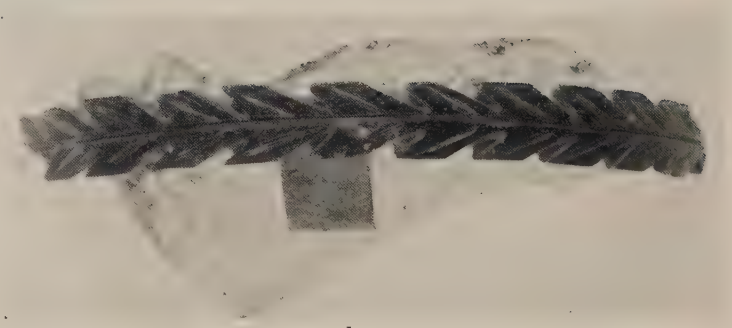
Photos. O. Böhm



a.

b.

c.



d.

a, *b*. The 'masks and columns' cup (Appendix, A 2, p. 203), formerly in the Cagnola Collection, now in the Varese Museum, Lombardy. *a*, Scale *c*. $\frac{1}{2}$
Photos. Varese Museum

c. Two views of the fragmentary beaker in the Vatican Library from the Catacombs, Rome (Appendix, A 10, p. 206). Scale $\frac{2}{3}$. *Photo. Vatican Library*

d. Fragment of a cup in the Louvre Museum from Cyzicus, Turkey (Appendix, A 15, p. 208). *Photo. Louvre Museum*

a

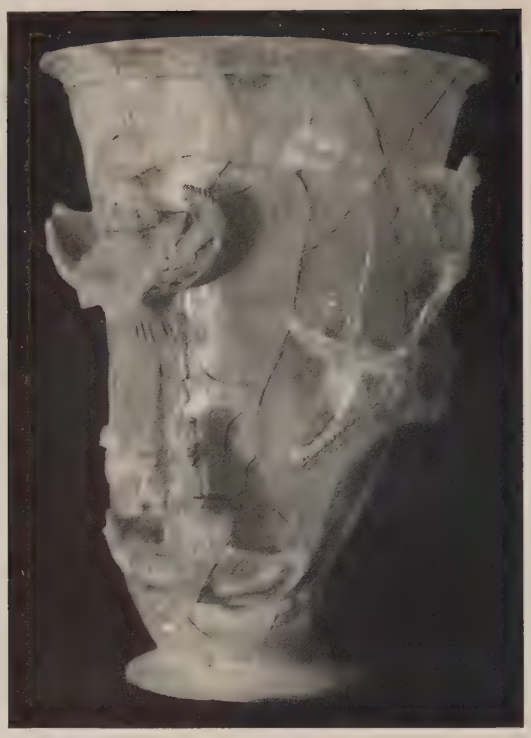
b

c

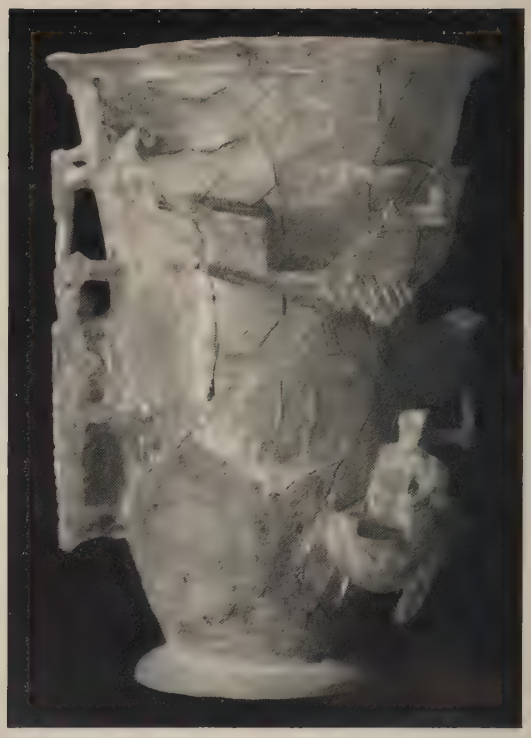
d

a, b, c. Three views of the 'fishes and snails' cup from Szekszárd, in the Hungarian Historical Museum, Budapest (Appendix, A 4, p. 204). Scale $\frac{7}{12}$
Photos. Hungarian Historical Museum

d. Fragment of a cup showing lower part of bearded face (now in the R.-g. Zentralmuseum, Mainz (Appendix, A 14, p. 207). Scale $\frac{3}{2}$
Photo. R.-g. Zentralmuseum



a



b

c

d

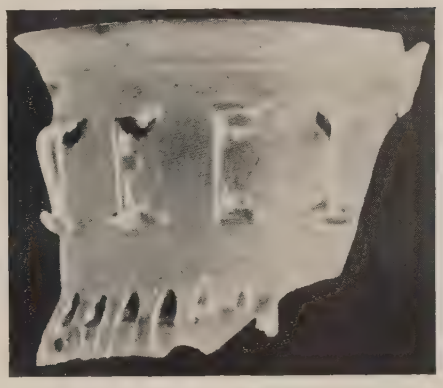
a, *b*, *c*. Three views of the fragmentary 'harbour' beaker from Begram, Afghanistan, now in the Kabul Museum (Appendix, A 8, p. 206). On *a* and *b* the base is restored, almost certainly incorrectly, as a foot-ring. Scale *a*, *b*, $\frac{1}{2}$; *c*, $\frac{2}{3}$
Photos. Délég. arch. franç. en Afghanistan

d. The reverses of three Alexandrian bronze coins of the second century A.D. showing the *pharos* of Alexandria (p. 193). Scale $\frac{1}{1}$
Photo. Ashmolean Museum

a

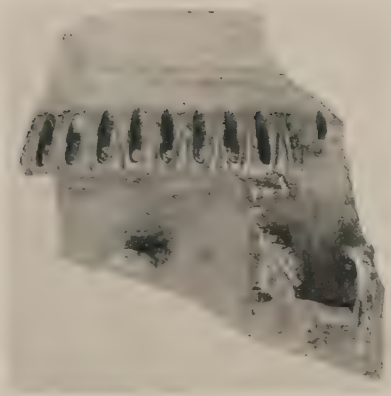
b

c



d

e



f

g

h

a. Fragment in the British Museum (Appendix, B 7, pp. 188, 209). Scale $\frac{3}{4}$. *Photo. British Museum. b.* Fragment from Behnesa (Oxyrhynchus) in the Victoria and Albert Museum (p. 188). Scale $\frac{1}{1}$. *Photo. Victoria and Albert Museum. c.* Fragment in the Altertumsmuseum, Mainz (Appendix, A 11, p. 207). Scale $\frac{3}{4}$. *Photo. Altertumsmuseum. d.* Fragment from County Fejér, Hungary, in the Hungarian Historical Museum, Budapest (Appendix, A 5, p. 205). Scale *c.* $\frac{5}{6}$. *Photo. after Archaeólogiai Értesítő*, xliv, fig. 85. *e.* Fragment in the Rijksmuseum van Oudheden, Leiden (Appendix, B 3, p. 208). Scale $\frac{1}{1}$. *Photo. Rijksmuseum. f.* Fragment from Rome, in the Metropolitan Museum, N.Y. (Appendix, A 6, p. 205). Scale $\frac{2}{3}$. *Photo. Metropolitan Museum. g.* Fragment from Trier, in the Rheinisches Landesmuseum, Trier (Appendix, A 12, p. 207). Scale $\frac{9}{16}$. *Photo. Trier Museum. h.* Fragment from Silchester, Hants, in Reading Museum (Appendix, A 13, p. 207). Scale $\frac{6}{5}$. *Photo. Mr. G. C. Boon*

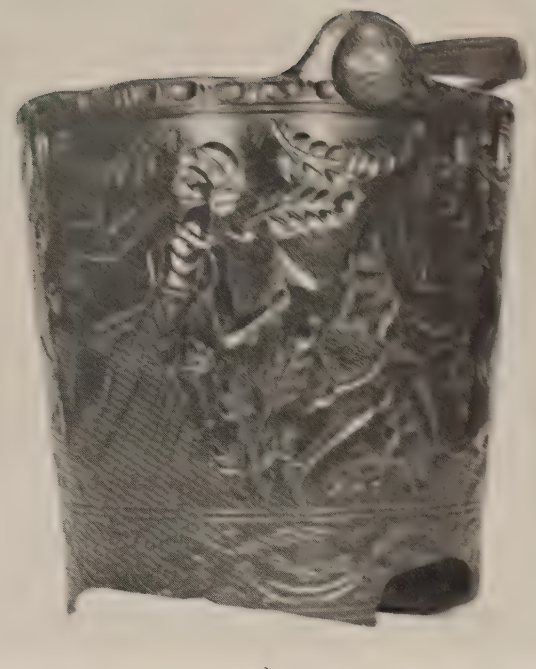
a

b

c

a, b. Two views of a cage-cup from Cologne, in the Antiquarium, Munich (Appendix, B 2, p. 208). Scale $\frac{2}{3}$. *Photos. Antiquarium, Munich*
c. Bronze *situla* from Cuddesdon, Oxon., now lost (p. 192). Scale *c.* $\frac{1}{3}$. After J. Y. Akerman, *Remains of Pagan Saxondom*, pl. xiii

a



b

c

d

a, *b*, *c*. Three views of the facet-cut *situla* in the Treasury of St. Mark, Venice, with Dionysiac scene (p. 201). Scale *c*. ⅓. *Photos. O. Böhm.* *d*. Fragmentary cage-cup from Soria, now in the Museo Arqueológico Nacional, Madrid (Appendix, B 11, p. 210). Scale *c*. ½. *Photo. Mus. Arq. Nacional, Madrid*

Semicircular mosaic from the apse of the *triclinium* in the fourth-century villa at Piazza Armerina, Sicily, showing the story of King Lycurgus (p. 198)
Photo. Vasari, Rome

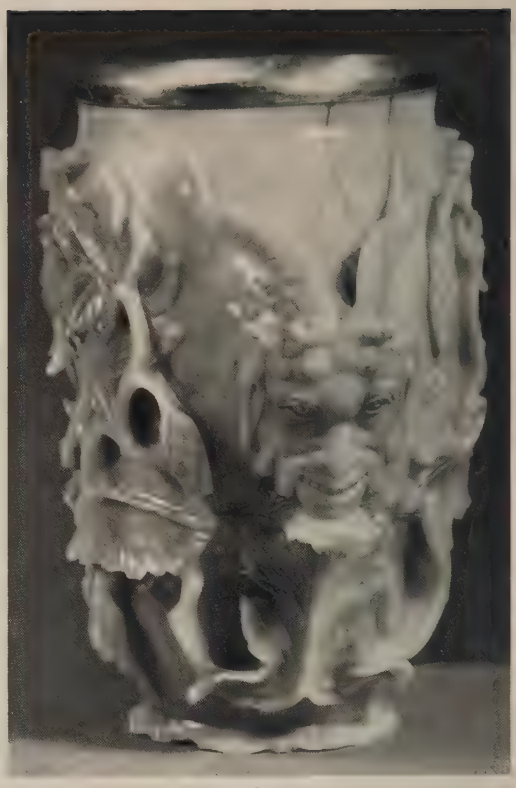
a

b

c

a, *b*. Details of the 'Oceanus' dish found at Mildenhall, Suffolk, and now in the British Museum, showing *a*. Pan, *b*. a Satyr (p. 201). Scale *c*. $\frac{1}{1}$ *Photos. British Museum. c*. Plaster cast, showing unrolling of Dionysiac scene on the glass *stamnium* from Hohensulzen in the Altertumsmuseum, Mainz (p. 201). Scale $\frac{1}{3}$. *Photo. Altertumsmuseum, Mainz*

a



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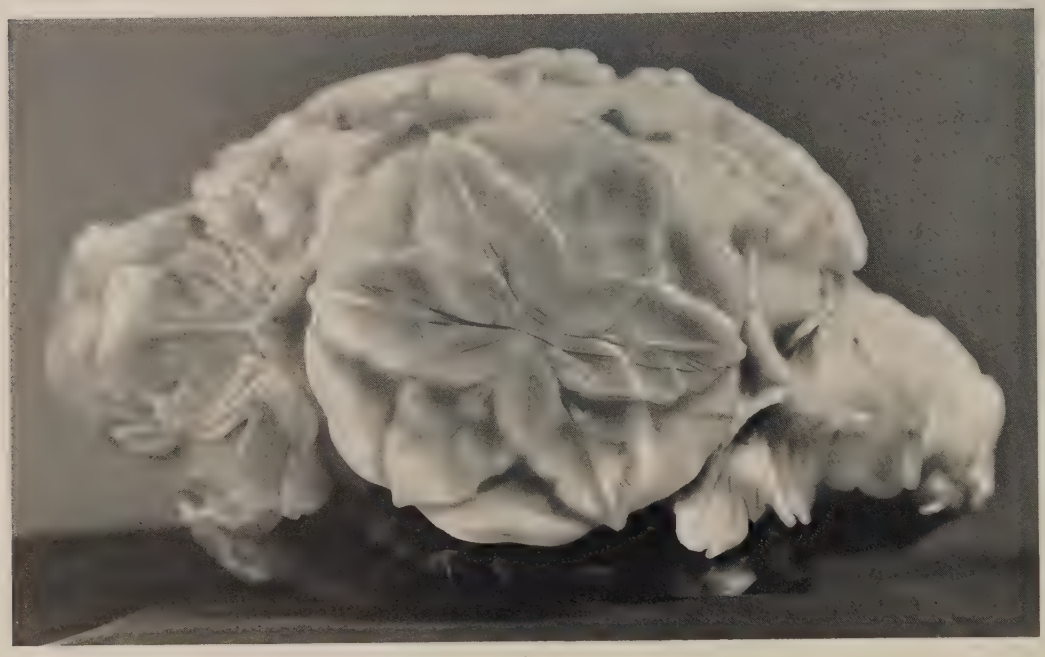


c

Three views of the Rubens agate vase, now in the Walters Art Gallery, Baltimore, Md. (pp. 201 f.).
Scale *c.* ½. *Photos. Walters Art Gallery*

a *b*

Two views of the Waddesdon vase, agate, with gold mounts; Waddesdon bequest, British Museum (p. 202). Scale $\frac{5}{8}$. *Photos. British Museum*

New Light on St. Edward's Crown

By MARTIN HOLMES, Esq., F.S.A.

[*Read 12th March 1953*]

ONE of the best-known documents in the possession of our Society is perhaps our MS. No. 108, with its detailed valuation of the Crown Jewels in 1649, and its uncompromising footnote 'The foremenciond Crownes since y^e^ Inventorye was Taken are accordinge to ord^r^ of Parlam^t^ totallie Broken and defaced'. We have seen it cited, in whole or in part, in various works on history in general and the Crown Jewels in particular, we have taken for granted certain conclusions from it, and we have perhaps been less ready to accept certain other conclusions drawn from it by other people. We think, in short, that we know it pretty well, and have seen all it has to show us; yet after all, this list of pieces of jewellery, with weights and valuations, may yield something more to us when we compare its information with that supplied by earlier inventories.

The particular section of the list that occupies our attention at present is headed 'An Inventory of that part of the Regalia which are now remoued from Westm^r^. to the Tower Jewell house'. In other words, it refers to the actual coronation crowns and jewels which were not part of the royal treasure but were kept, and had always been kept, at the abbey treasure-house because they were part of the treasure of St. Edward's shrine. The list has been carefully and conscientiously drawn up, and its wording suggests a good deal of disappointment on the part of its compilers, and the anticipation of even sharper disappointment on the part of those for whom it was immediately intended, for it opens with a blunt piece of bad news about the queen's crown, which apparently entitles it to come before the king's. 'Queen Ediths Crowne', it runs, 'formerly thought to be of Massy gould, but vpon triall found to be of Siluer gilt Enriched with Garnetts foule pearle Saphires and odd stones poz 50 Ounces ½ valued at . . . £16.' This news once broken, it turns to the item which one might have expected to head the list, 'King Alfreds Crowne of gould wyerworke sett with slight stones; and 2 little bells poz 79 Ounces ½ at 3 li. per Ounce . . . £248. 10*s*.' Valued at £3 an ounce, the gold alone would come to £238. 10*s*., so they must have allowed only the odd £10 for the stones, which implies that they were very slight stones indeed. Then the list goes on, by way of a 'large glass Cupp . . . formerly called an Aggat Cupp' to a passage of further disillusionment about the sceptres. The gold on a 'staff of black and white Iuory with a doue on the top with binding and foote of gould' is valued at £4. 10*s*., but then comes a 'large staff with a doue on y^e^ top formerly thought to be all gould but vpon triall found to be the lower part wood within and siluer gilt without weighing in all 27 Ounces valued at £35', and after that 'One small staff with a floure de luce on the topp formerly thought to be all of gould, but vpon triall found to be Iron within and siluer gilt without the siluer valued at £2. 10*s*.' The last minor disappointment is concerned with 'Two Scept^rs^. one sett w^th^ pearles and

stones the vpper end gould the lower end siluer, y^e^ gould poz 23 Ounces valued at 55^s^ per Ounce the lower end being horne and a little siluer gilt valued at 12^s^. The other siluer gilt with a doue formerly thought gould poz 7 Ounces ¾ at 5^s^ 6^d^ per Ounce . . . £65. 16/10½.' The other items are interesting but irrelevant to our present purpose, and contain no further surprises.

It is worth while to pay a few moments' attention to these items, as they point out an interesting line of investigation. First, the disappointment is due to the parliamentary commissioners' ignorance of what they might expect to find. Two hundred years or so before, a monk named Sporley had drawn up a list of 'relics of holy Confessors' preserved at the shrine and used at coronations,[1] and in his list we find the best golden crown, the queen's crown, the golden sceptre, a wooden rod plated with gold, an iron rod, and two other rods that go with the queen's crown. The same seven items occur in a list of these coronation ornaments drawn up by Lancelot Andrewes, Dean of Westminster, when handing over in 1606 to his successor Richard Neile,[2] but by this time the wooden core of the one rod and the iron core of the other would appear to have been forgotten. The first appears as a long sceptre with a dove on the top, and the other as a long sceptre with a pike of steel in the bottom. Perhaps the lily-headed iron rod had once had a silver-gilt ferrule which had become detached or mislaid, perhaps there had never been one, and the original core had always protruded from the end of its silver-gilt casing. In either case, by the beginning of the seventeenth century it was assumed that this was no more than a serviceable finial, and nobody knew, or remembered, that this particular rod was of iron all the way up to its old-fashioned, floriated head.

But what are these rods, one may ask, and what are sceptres of wood and iron doing among the golden ornaments of kings? There seems to be no attempt at deception. In Sporley's fifteenth-century inventory they are quite frankly listed as 'unam ligneam virgam deauratam alteram ferream'. The likeliest explanation is that they are, in archaeological phrase, grave-goods. Edward I, in his tomb hard by that of the Confessor, was found by our Society, in 1774, to be holding a gilt copper sceptre and rod, and wearing a crown of gilt metal (pl. LXXVI, *a*), and it is at least a plausible conjecture that a similar funeral crown, sceptre, and rod were taken out of St. Edward's grave when he was transferred by Henry III to his present shrine about the middle of the thirteenth century. By the time Sporley made his list, a couple of hundred years later, they had been there long enough to create a general idea that they had been deposited there by the saintly king himself for the benefit of his successors. The golden sceptre with the horn grip, and the iron rod with the 'floure de luce' head, may have come out of the actual grave, and it is tempting to think that the wooden staff, in its silver-gilt casing topped with a golden dove—there would appear to be 10 ounces of gold to 17 of silver, and it was only the lower part that was wood and silver-gilt—may have been an actual stick associated either with the Confessor or with some other, earlier saint and preserved, like the Kells Crosier and similar pre-

[1] British Museum Cotton MS. Claudius A. viii, f. 31 *b*. Cited by L. G. Wickham Legg, *English Coronation Records*, p. 191.

[2] Bodleian, Ashm. MS. 863, p. 297. Wickham Legg, *op. cit.* p. 242.

Conquest relics, in a covering of precious metal. St. Edward's Staff, in fact, was probably just what its name implies, and this would account for its ceremonial use on the occasion of royal visits as late as the days of Elizabeth I.

Henry III was particularly devoted to the Confessor, and it is significant that it is only after his translation of the saint's body to its present home that we hear reference to St. Edward's Crown as a relic preserved at the shrine and used for the actual coronation. It has been shown on a former occasion[1] that Edward I, according to Hemingburgh, described himself as the 'guardian of the crown of St. Edward'—a new form of appellation. Similarly, the old 'great crown', with which the early Plantagenets were crowned, appears in an inventory of this time in a different capacity—as the crown carried over the king's head when he walks in procession after his coronation; and Robert of Gloucester, when compiling a history by putting together scraps of material gathered from other people, goes so far as to insert an original statement of his own when he refers to King Alfred's Crown as 'the king's crown of this land, that in this land yet is'. When we have these allusions to the presence of a pre-Conquest crown at Westminster, and descriptions of at least one rod that sounds like an early funeral 'property' and another that sounds very like the metal-sheathed relic of a saint, it is permissible to suppose that Henry III has done with the Confessor's regalia just what Abbot Laurence had already done with his grave-clothes and ring—namely, taken them out and preserved them for ceremonial purposes in the abbey church.

The position is expressively indicated by an early-fourteenth-century document in the Public Record Office[2]—a memorandum on coronation procedure specifying which authorities are responsible for the various ornaments required. Three Swords of State, and two processional sceptres, are said to come 'from the King's Treasury',[3] but the vestments put on after the anointing are described as 'the tunicle of the saint, from the church of Westminster, the shoes from the treasury of the same, and the spurs which are to be provided by the king's ministers'.[4] This sounds, incidentally, as if the notes had been originally drawn up for the coronation of Edward I—the first after the opening of St. Edward's grave—since we know that the coronation spurs of Henry III were no longer available, having been given to the fund for rebuilding the abbey, and a new pair would have to be provided, from some source or other, for his son. The summary of the Coronation Oath, too, shows the earliest reference to the 'laws, customs and franchises of the glorious King St. Edward',[5] a phrase which is not found in former recensions and indicates that the cult of the Confessor is now being introduced for the first time. Next comes a mention of 'the coat of St. Edward which dwells at Westminster',[6] and then 'the sword that dwells in the king's treasury'.[7] The 'collar from the treasury of Westminster'[8] is obviously the neck-band linking the

[1] *Archaeologia*, lxxxvi, 77 sq.

[2] Chancery Miscell. Roll 18/3 (dors.) cited by J. Wickham Legg as Appendix XI to *Three Coronation Orders* (Henry Bradshaw Society, vol. xix), 1900.

[3] '. . . *troys* espeys . . . q*i* serront p*ris* hors del tresorie le Roy . . . deux cept*res*, qi soront p*ris* hors de la T*r*esorie le Roi.' *Op. cit.*

[4] 'vestuz dun Tunycle de saint quest de la eglise de Westm*inster*, soient les sudayrs, q*i* sont ensem*en*t de mesm*e* la t*r*esorie, *et* les esp*er*oun*n*s qi sor*on*t de la p*ur*veance de Ministr*es* du Roi aptez a sees peez'. *Ibid.*

[5] '. . . les lays, *et* les custumes, *et* les Fr*a*nchis, gr*a*ntiz . . . de Gloriouse Roi Saint Edward. . . .' *Ibid.*

[6] 'la cote Saint Edward q*i* dem*ur*t a Westm*inster*'. *Ibid.*

[7] 'lespee q*i* dem*ur*t en la t*r*esorie le Roi'. *Ibid.*

[8] 'le cole de la t*r*esorie de Westm*inster*'. *Ibid.*

armillae, as it is given with the words *accipe armillam*. Then comes the mantle, also 'from the treasury of Westminster', then the crown, 'St. Edward's ring',[1] the sceptre, and the verge. These have no ownership assigned to them, presumably because they were the well-known treasures of the shrine. At the close of the service are two alternative instructions. If the king wishes to take off 'the royal ornaments of St. Edward'[2] in the abbey church itself, there must be other attires, like them at all points, provided in readiness for him to put on. If, on the other hand, he wishes to wear St. Edward's ornaments in the procession back to Westminster Hall, arrangements must be made for them to be brought back to the abbey afterwards in safe custody 'as is their right'.[3]

It is clear from this that the 'royal ornaments of St. Edward' comprised the crown, tunicle, shoes, coat, bracelets, and ring, and probably the mantle, sceptre, and verge into the bargain, and that they were abbey property, and regarded as personal relics associated with the saint. Coming, as it does, so shortly after his exhumation and translation, the document may be taken as evidence that a number of his royal ornaments had become available, all at once, for coronation purposes, and we may justifiably assume that they had come out of his grave.

Two other pieces of fourteenth-century evidence indicate that St. Edward's Crown was regarded as a saint's relic rather than a symbol of kingship. First is the indignation aroused by its 'pollution' when Piers Gaveston was allowed to carry it at the coronation of Edward II, and the other is the fact that Richard II, in 1399, had to have it brought from Westminster to the Tower so that he could actually and physically take it from his head and surrender it to his supplanter Henry of Bolingbroke. The act of uncrowning himself, and undoing the effects of his consecration, could hardly be considered effective unless it were performed with the holy relic that had originally crowned him.

These suggestions about its history are corroborated by what we know of its appearance, for there is quite an amount of evidence by which we may form some impression of the general shape and style of St. Edward's Crown. The parliamentary document's description 'of gould wyerworke' is puzzling at first sight, but may well be used to denote a decorated setting, such as we shall see in some of our examples later on. The crown is called King Alfred's Crown because of the inscription on the lid of the box in which it was kept. This inscription is quoted by John Spelman in his life of King Alfred, and may be rendered, 'This is the chief crown of the two, with which were crowned Kings Alfred, Edward and others'. The suggestion that the crown was originally Alfred's is as old as Robert of Gloucester, but has no evidence or even likelihood to support it. Our manuscript says that it was set with slight, i.e. semi-precious, stones and perhaps—though the punctuation makes it uncertain—with two little bells. Spelman's words, as quoted by Dart,[4] are 'In the arch'd Room in the Cloysters of *Westminster* Abbey, where the ancient *Regalia* of this Kingdom are kept; upon a Box (which is the Cabinet to the ancientest Crown) there is (as I am inform'd) an Inscription to this Purpose; *Haec est principalior corona, cum qua coronabantur*

[1] '. . . lanel de Saint Edward. . . .' *Ibid.*

[2] 'sil se voile devestir des ornamentz reaux de Saint Edward deinz le eglise'. *Ibid.*

[3] 'les ditz ornamentz de Saint Edward oue safe conduit soient reportez enterement a leglise de Westminster sicom apartient a droit.' *Ibid.*

[4] *Westmonasterium*, vol. ii, Bk. III, p. 10.

Reges Aelfredus, Edvardus, &c. and the Crown, which were worthy observing, is of ancient Work with Flowers, adorn'd with Stones of somewhat a plain setting.' These two accounts both indicate something rather archaic and, to the taste of the time, crude, but the important thing is that they tally reasonably well with existing early crowns and with the brief statements of two other people who saw St. Edward's Crown at coronations. Froissart was not himself in England when Henry IV was crowned, but his description of the ceremony[1] is full of touches that suggest he got his information from an eyewitness, and he specifically says that the Crown of St. Edward was arched over like a cross. There is enough evidence of pictures and statuary of the time to show that the open crown was still the usual form, and for that reason this difference in the shape of the relic of St. Edward was sufficiently unusual to be worth recording. By Tudor times the arched form was normal, and would not excite particular remark, so we have no detailed description of the crown from that useful writer Edward Hall, though he quite possibly saw it when it was used—most irregularly—to crown a Queen Consort in 1533. Henry VIII was taking no chances, and was doing everything possible to show that Anne Boleyn was his lawfully wedded wife and the indisputable Queen of England, the still-living Katharine of Aragon having been proclaimed no wife of Henry's but merely the Princess Dowager, widow of Arthur, Prince of Wales. Hall describes Anne's coronation in considerable detail,[2] but says nothing more of the Crown of St. Edward than that 'being heavy' it was changed as soon as possible for a lighter one.

Our other eyewitness is Sir Simonds d'Ewes, who wrote to a friend in February 1626 a long description of the coronation of Charles I, which he had attended two days before,[3] and though he does not exactly describe St. Edward's Crown he gives a hint of its appearance by saying that the Crown of State, which the king put on afterwards, was taller and narrower than the one with which he had been crowned. Now this Crown of State has been very well recorded for us, not only in detailed specifications of the early sixteenth century in our own library and elsewhere, but also in Daniel Mytens's portrait of the king (pl. LXXVIII, *b*), where the correspondence with the descriptions is so close as to show that this crown had changed very little in a hundred years. When we try to imagine a crown lower and in some way broader than this, we can see from pl. LXXX that there are two crowns, with a precisely similar difference in their general proportions, in the carved coronation scenes on the chantry of Henry V at Westminster. On one side he is wearing his Crown of State, very like that of King Charles—indeed, there is good reason to suppose that it may be the same crown—and on the other side of the arch he is being crowned with something lower, apparently solid above like a helmet and with its rim spreading out more widely. A hundred years or so later, a crown of this form is illustrated twice in the funeral roll of Abbot Islip of Westminster. Once it appears in a coronation scene, being set on a king's

[1] Froissart, *Chronicles*, Berners's translation, vol. ii, chap. ccxli (ccxlv). It is perhaps worth noting that Lord Berners translates Froissart's *archief en croix* by the words 'close above', which would convey to the sixteenth-century reader the impression of an ordinary covered-in crown. Berners is more than likely to have seen his close friend Henry VIII crowned with St. Edward's Crown, and would have amended Froissart's description (as he did in other instances) if he had thought it inaccurate.

[2] Hall's *Chronicle, sub anno* xxv Hen. VIII.

[3] Cited by Halliwell-Phillips, *Autobiography and Correspondence of Sir Simonds D'Ewes*, 1845.

head, and once we see it on the head of a saint in the architectural border of the abbot's death-scene (pl. LXXVI, *d*, *b*). It is natural, in the circumstances, that the saint represented should be St. Edward, and the artist has very properly shown him wearing the particular crown associated with his name. He is wearing it again in his effigy on the tomb-screen of Henry VII, where it very clearly shows its helmet-like cap and unexpectedly small finial (pl. LXXIX, *b*).

It is noteworthy that all these examples have Westminster sources, and it would be at Westminster, above all places, that the form of St. Edward's relic would be most familiar. The ordinary Englishman might occasionally see it afar off at a coronation, if he were very lucky, but it does not appear to have been exposed for veneration, as was the saint's mantle. When we find Westminster artists and sculptors, therefore, associating the saint with an unusual form of crown, in the three widely differing media of stone, bronze, and manuscript, over a period covering about a century, we may justifiably assume that the representations are based not on each other but on a common original preserved as a relic.

On the death of Henry VIII, however, there were three coronations in thirteen years, affording greater opportunities of seeing and remembering the striking form of the coronation crown. In 1559 an engraving of Elizabeth I, attributed to Frans Huys, showed her at full length, and in a corner her armorial bearings, surmounted by a crown not of the usual form (as seen in the corresponding engraving of Mary Queen of Scots) but helmet-like and apparently solid, with an unusually small 'monde' and cross upon its apex. Something of the same sort in general proportion, but without the solid filling, appears in the portrait of the queen in the 'Bishops' Bible' of 1569, and a crude but helmet-like diadem is shown on the head of Henry VII in the 1577 edition of Holinshed's *Chronicle* (pl. LXXVI, *c*). This particular picture is the first in Holinshed's line of kings in which one can trace any attempt at portraiture, and it is significant that with this attempt at reproducing the king's features the crown changes to this curious shape from the stately conventional form used in so many other illustrations in the same book (pl. LXXIX, *c*).

But perhaps the most significant illustration is the crown in the so-called 'Armada' portrait of Elizabeth at Woburn Abbey (pl. LXXVII, *c*). The queen is shown in a symbolical attitude, with her hand resting on a globe, a chair of state at one side and the crown on a table at the other, while the Spanish fleet can be seen successively in pride and in disaster from the windows at the back. The form of the crown is completely different from the conventional outlines employed in the art and heraldry of the time. It is not an arched crown over a loose cap of estate, but has a smooth and apparently rigid hemispherical lining fitting close up to the arches, which cross it like the reinforcing bands on an early helmet. The finial is disproportionately small, the tall pear-shaped pearls that surmount the crosses recall the diadem on the Great Seals of the Confessor and of William the Conqueror, and it may be claimed that in this picture we have a representation of the particular crown that stood for so many of the old traditions of England.

Failing other illustrations of the actual crown—and there are no others known to me—we may consider the type it represents. Our earliest rubric for a coronation

service, that of the eighth- or ninth-century 'Pontifical of Egbert',[1] does not mention a crown at all. The thing that is to be put on the king's head is a helmet, and the Latin word used, *galeum*, is a false form of *gălea*, which particularly denoted a helmet of thick felt or leather in a metal framework, the word *cassis* being used for an all-metal headpiece. It is permissible in this connexion to recall the crown-like framework of bronze that was found at Leckhampton in 1844 and is accepted as the framework of a helmet. Antiquaries like Way and Hewitt in their time have pointed out the similarity between these Saxon or Norse helmets and the type of crown shown in the famous Life of St. Edmund from the Holford collection—now, alas, no longer in Great Britain. This crown, illustrated in pl. LXXVII, *c*, very clearly shows the characteristic features of arched metal framework and inner cap coming down below the rim and perhaps turned back over it to cover the edge of the metal, while the crowns on some coins of the eleventh century add decorative pendants like the *infulae* of a mitre, possibly the vestigial remains of a chin-strap. All these features are to be seen likewise in the funeral crown of the Empress Costanza, in the cathedral treasury at Palermo (pl. LXXVII, *a*), and a crown of this sort might well be described as 'of gould wyerworke' in contrast to the 'massy gold' of the Crown of State.

Another famous helmet-crown, almost contemporary with Edward the Confessor, is the Hungarian Crown of St. Stephen (pl. LXXVII, *b*). Here again we have the dangling ornaments—like the '2 little bells' of our manuscript—and the cross on the summit corresponds both with the St. Edmund picture and with the passage in the *Vita Sancti Eadwardi* in which Earl Godwin, on his return from banishment, exhorts the king in the name of Christ, 'the sign of whose holy kingdom thou wearest upon thy crown'. That happened in 1052, and from the Chronicles of Abingdon we know that in the preceding year Edward had commissioned an imperial crown from a monastic goldsmith called Spearhafoc (who was quite unexpectedly made Bishop of London not long afterwards), we may assume that the crown which he made for King Edward followed the current fashion in such ornaments.

These last two crowns, the Crown of St. Stephen and the Crown of Costanza, have been called eastern European in style, but it was a style that got to eastern Europe only by migration, succeeding the more characteristically Eastern fillet of pearls. It is supposed to have been the Scandinavian rovers who carried so much of Byzantine tradition—including the ritual of the Orthodox Church—into the Slavonic countries, and in the same way these so-called Eastern crowns are derivatives of the Northern helmet, and about as Eastern as the Norsemen of the Varangian Guard.

We have now traced the general style of this crown back to the eleventh century, and must turn to consider why the St. Edward's Crown of the Restoration departed so widely from it. It is well known, and often repeated, that the new regalia were to be made as near as might be to the fashion of the old, but it is not always realized how much trouble was actually taken in this respect. First of all, we must bear in mind how little there was to go upon. The ancient Crown of St. Edward was kept, with his

[1] Paris, Bib. Nat., fonds latin 10,575, fo. 130 *b*. (Surtees Society, 1853, p. 100). Wickham Legg (*op. cit.* p. 3) gives this reference but transcribes a better text (Rouen, Bib. Munic., MS. A. 27, fo. 88) for a similar service, known as the *Pontificale Lanaletense*, but supposed to be of northern English origin.

other relics, in the abbey undercroft or the chapel of the pyx. Spelman's remark that it would be worth observing is a shrewd indication that one did not ordinarily get much chance of observing it. Sir Robert Vyner had to make a new St. Edward's Crown without really knowing what the old one was like, so we can hardly blame him for following the general fashion of the Crown of State, or making his Crown of State with eight ornaments around the rim instead of its predecessor's congested and asymmetrical ten. How much trouble he took over the other things we can gauge by comparing them with ordinary examples of contemporary taste in such matters. The spurs, for instance, are not rowelled spurs but antique prick-spurs, a type which had been obsolete for centuries but was clearly visible on early Great Seals. Again, the Great Sword of State, which represents the sovereign's personal weapon, was a legitimate medium for the elaborate goldsmiths' work of the late seventeenth century, and the designer took full advantage of his opportunities; but the processional Swords of Justice and Mercy represent a conscientious attempt to imitate the simple lines of the Middle Ages. Indeed, the pommels take the process even farther back, since their form, with hollow centres exposing the tang of the blade, shows a resemblance to the ring-pommels seen in sixteenth-century illustrations upon the swords of the aboriginal Irish. The goldsmith has put in a feature associated with a specifically primitive type of sword to emphasize the archaism, very much as Macready put in a backcloth compounded from Stonehenge and—I think—Avebury to give 'period' to his production of *King Lear*. We are apt to miss this point because the royal arms of William and Mary on the scabbard of the Great Sword of State mislead us into thinking that that sword is not contemporary with the other two; but the William and Mary escutcheon is a later addition. The sword was made for Charles II, like the others, and therein lies the importance of the wide difference in their styles.

As with the spurs and swords, so with the crown. The earliest representation of the present Crown of St. Edward is in Michael Wright's great portrait of Charles II in the royal collection (pl. LXXIX, *a*). Here we can see it looking even more medieval than it does today, partly because of the narrowness of the ermine at its rim and partly because the rim and its ornaments have an outward spread like those on the monuments of Henry III and Eleanor of Castile—the crowned monuments most easily accessible to a London goldsmith, and therefore likeliest to be studied and imitated. Moreover, it gives at a glance the impression that its predecessor appears to have given to Sir Simonds d'Ewes, a suggestion of something like the old Crown of State, but not so high and rather broader in the beam.

The deep depression of the central orb and cross, and the consequent saddle-backed appearance of the arches, find no parallel in any of the early illustrations we have been considering. They are characteristic of the baroque style arising in the seventeenth century, and their apparent occurrence in one or two early instances would appear to belong not to any type of crown but to a special way of depicting crowns when the crowned head, or crowned figure, has to be got into a limited field. On some of our earliest coins, and on the Great Seal of Elizabeth I, the crown has had to be depressed at the top to fit the finial into the picture at all. It is a convention associated only with those particular conditions. It does not appear, for instance, in profile portraits

where there is room for the crown to take its proper shape, or in any crowns depicted where there is adequate head-room, either heraldically or pictorially. But someone has taken the convention too literally, and followed it too closely, and in due course what started as an artistic expedient, and was later revived as a fashion, has been given some profound and symbolical significance that would have surprised Vyner and his contemporaries. Incidentally, Kneller's portrait of Charles at the end of his reign, and Sandford's engraving of the crown in his *Coronation of James II* (pl. LXXVIII, *a*), would seem to suggest that the depression was modified by 1685, when men wore full-bottomed wigs with straight up-and-down curls, instead of combing their hair sideways to their shoulders as at the Restoration.

To this general imitation of the Crown of State, likewise, may be ascribed an error which was pointed out a good many years ago by Sir William St. John Hope. A cap of estate turned up with ermine forms part of the traditional State dress in which the sovereign arrives at Westminster, and also, in the form of a lining to the Crown of State, it is a part of the purple robes put on after the ceremony. But it has no part in the ceremonial vestments assumed at the anointing, it was never included among St. Edward's robes, and has no place in St. Edward's Crown. The depression of the arches, and still more the broad roll of ermine at the lower edge, combine to obscure the excellent proportions of the diadem itself and its ring of crosses and fleurs-de-lis (pl. LXXVII, *d*). Looked at by themselves, these bear witness to Vyner's intelligence and skill in recapturing the style of the Middle Ages, and while the treatment of the arches may be laid to the goldsmith's charge, Sir Edward Walker's account of the preparations for King Charles's coronation shows that the superfluous cap was prepared only on the instructions of the Coronation Committee of the time.

This, then, is the crown which Major-General Sitwell has in his charge at the Tower. His investigations into the records of his office have enabled us to learn a great deal more of importance about the Crown Jewels in general, and with regard to St. Edward's Crown in particular he has unearthed a transcript of a list of coronation expenses which was published in the second volume of our Proceedings, and repeated in at least one subsequent work on the Crown Jewels, without its most important statement being recognized and appreciated.

The original document is a statement of the coronation expenses of Charles II in 1661, drawn up for presentation to the authorities responsible for making the coronation arrangements for James II in 1685. It belonged to our Fellow Mr. Robert Cole, who had bought it when some tons of official documents were being sold out of the Tower as waste paper in 1838 or 1839. The transcript in the Jewel Office appears to date from that period, but the whereabouts of Mr. Cole's original, I fear, we have not yet been able to trace.[1] The date had been misread as 23rd July 1684/5, and the reference had been taken to refer to the alteration of the regalia for the coronation of James, which had taken place in the previous April, but the word mis-read as July must have been a contraction for February, since only January, February, and March occupied that equivocal position of being either the first quarter of 1685 or the last one of 1684;

[1] Since this paper was read, I am glad to say that General Sitwell has located the document. It is now B.M. MS. Add. 44915, and the February date is unquestionable.

and in January King Charles was still living and there would be no thought of a new coronation estimate. Moreover, Sandford's detailed account of the preparations for King James's coronation expressly says that Sir Gilbert Talbot, Master of the Jewel House, was required to produce on the 21st February a detailed statement of what had had to be done last time and what it had cost. By the time the document was exhibited to our Society, on 18th March 1852, the date had been correctly interpreted as 23rd February.

The important passage is a brief entry concerning St. Edward's Crown. 'For y^e^ addition of gold and workemanship, £350', and another £500 for the hire of the jewels. This looks, at first sight, like the alteration of Charles's coronation crown for his brother James, but then there comes an item of some £7,800 odd for supplying a Crown of State, and everything else in the list is being made, apparently, *ab initio*, which sends us back to the date to confirm that these are really the coronation expenses of 1661, and that instead of the cost of supplying a new Crown of St. Edward for the ceremony they include a charge for additions and repairs *to an already existing crown*. What was it? We may remember the Imperial Crown of gold and jewels that was set on the head of Cromwell's funeral effigy and yet does not appear in his funeral expenses, and this may have been diverted to a more suitable use at the Restoration. But there is something else worth noticing in the list, and that is the weight of the new crown—82¼ oz. The old 'Imperiall Crowne of massy gold' had weighed over 7 lb. Troy, but the older crown, 'King Alfreds Crowne of gould wyerworke', had weighed just under 80 oz., and the 'addition of gold and workmanship' might well have brought it up to 82. Indeed, when St. Edward's Crown was delivered to the Dean for the coronation of James II, its weight was recorded as 79 oz. 13¾ dwt.—almost exactly the weight of the lost relic.

A Harleian manuscript at the British Museum,[1] brought to our notice by the kindness of Mr. Tanner, gives a list of the purchasers of the various individual jewels and regalia, and notes that the gold was delivered to the Mint to be coined. General Sitwell has identified the names of some of the individual purchasers as those of officials of the Royal Mint, notably Gourdon the Master, Sir Aaron Guerin, and a certain Mr. Dumaresq, but they were buying, apparently, in a private capacity. The authorities of the Royal Mint have no record that this gold was ever actually received by them for coining, and the General's exploration of the Declared Accounts of the Mint at the Public Record Office has revealed no trace of it in the recorded sources of gold acquired for melting in 1649, while there is a gap covering the relevant period at the Restoration.

Our evidence is, then, that the broken gold of the crown, 79½ oz. in weight, was supposed to go to the Mint, but there is no trace of its having got there; the names of Mint officials appear among those of the independent purchasers of Crown jewels, and at the Restoration we find Sir Robert Vyner providing a new St. Edward's Crown that weighs a little more than the old one, but charging no more than the figure that subsequent bills show to be the usual one for refurbishing only. First 79½ oz. disappeared without trace, now some 80 oz. appear without charge, and though nothing can be proved documentarily, there would seem to be a strong possibility that the gold is the same throughout.

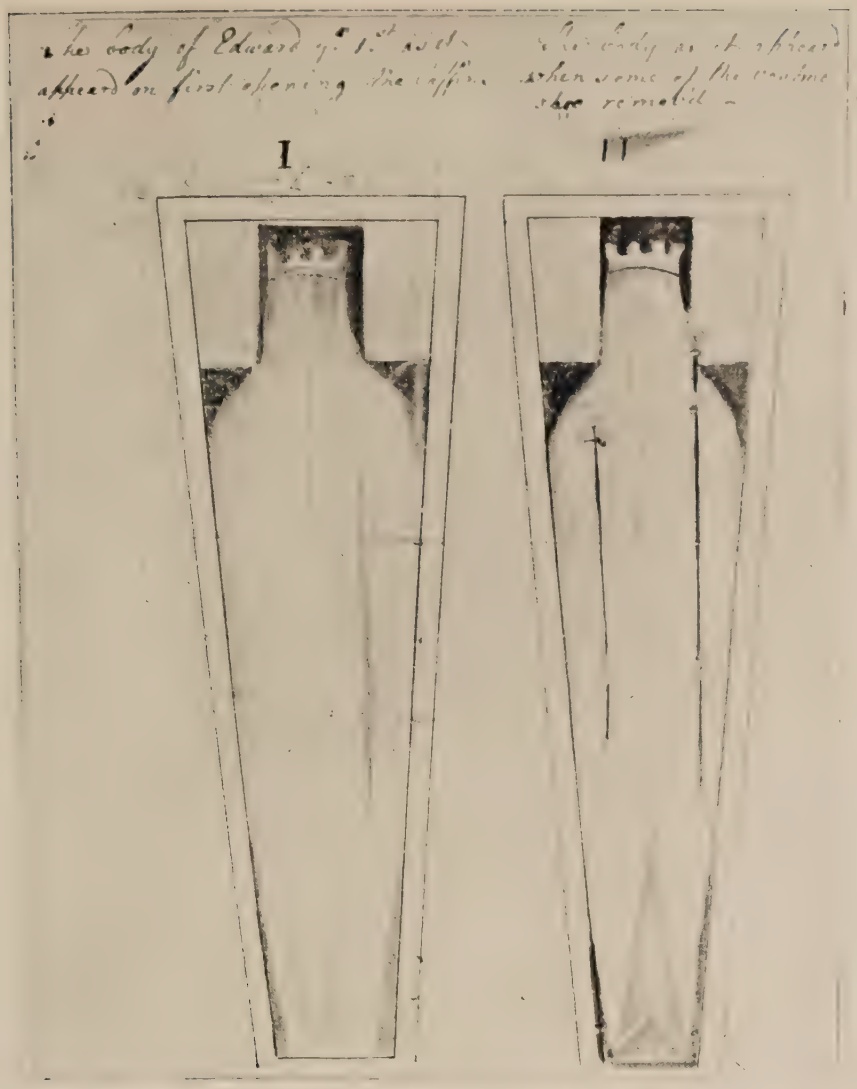
[1] B.M. MS. Harl. 7352.

It may be wondered that more was not made of this at the time. As a matter of fact, the printed leaflet on the regalia issued at the Tower under Charles II did say that St. Edward's was the original crown, but Strype in 1720 cited Sandford in contradiction of this, and we have all been ready to take his contradiction for granted. The truth is probably that the Crown of State attracted all the attention. This was the crown that stayed regularly set with jewels, that made periodic appearances when King Charles visited the House of Lords, that was exhibited in the Tower to interested visitors, and received such rough handling from the notorious Colonel Blood. This was the crown that could be, and was, reset in various ways for various sovereigns to wear with their State robes, and was regarded as if it had been the actual Coronation Crown itself. The jewellers' bills survive to indicate that St. Edward's Crown was kept unset for most of the time, since it came out only for coronations, and not always then. George IV seems to have intended originally to be crowned with it, and to change it, after the service, for his new Imperial State Crown, but the splendour of the latter must have been too much for him, as eventually it was the one crown used throughout. Nayler's elaborate account of the preparations includes, it is true, a picture of St. Edward's Crown in the hands of Lord Anglesey, but these single full-page portraits, like much other coronation literature and iconography, would have been prepared at leisure beforehand from a mixture of report and conjecture, and any portrait of Lord Anglesey is suspect if it shows him with two legs in 1821, since he had lost one six years before at Waterloo.[1] More trustworthy is Nayler's view of the Procession of the Regalia in Westminster Hall, where the new crown is clearly recognizable in the hands of the Dean, though it is still described as St. Edward's in the printed Order of Service.

The same anomaly arose at the coronation of Queen Victoria. Here the crown is again called St. Edward's, but both the Order of Service and the queen's own Journal show that only one crown was used—the new Crown of State, which had been made for the occasion and set with the jewels of its predecessors. Leslie's picture of the queen receiving the Sacrament puts this beyond doubt, as it can be seen that she has removed, and entrusted to the Lord Great Chamberlain, the crown with which she has just been crowned, and it is quite clear which crown that is, though it has become St. Edward's for the purpose of the ritual.

The true St. Edward's Crown took a back seat throughout the nineteenth century. It was either kept unset, or set with stones of no particular value. General Sitwell's researches have shown that it was prepared for use at the coronation of Edward VII, but the king's state of health led to the abandonment of anything that might increase the strain upon him. The golden crown was made lighter by 10 oz., but even so it was eventually decided to use only the Crown of State, which is lighter still. St. Edward's was carried in the procession and delivered at the altar in the proper way, but the other crown, already set there in advance, was substituted at the correct moment and used for the actual crowning, so that it was left for King George V, after a lapse of 150 years, to revive the use of a St. Edward's Crown that may indeed have been made from the shattered metalwork of St. Edward's crown.

[1] It will be seen from pl. LXXIII, *a* and *c* that the crown carried by Lord Anglesey in Nayler's plate is copied from the engraving in Sandford.



a. Edward I in his coffin. From a drawing in the library of the Society

b. St. Edward the Confessor. From the Islip Roll, now in Westminster Abbey Library

c. Henry VII. From Holinshed's *Chronicles*, 1577

d. A coronation at Westminster. From the Islip Roll

a. Crown of the Empress Costanza at Palermo. From Bock's *Kleinodien*

b. Crown of St. Stephen. From Bock

c. Crown from the 'Armada' portrait of Elizabeth I at Woburn Abbey. (By kind permission of his Grace the Duke of Bedford, K.G.)

d. St. Edward's Crown, in the Tower of London

e. Coronation of St. Edmund. From the Holford MS.

a. St. Edward's Crown in 1685. From Sandford's *Coronation of King James II*

b. State Crown of Charles I. From the portrait by Daniel Mytens. (By kind permission of the National Portrait Gallery)

c. Lord Anglesey with St. Edward's Crown. From Nayler's *Coronation of George IV*

d. Detail from the Procession of the Regalia. From Nayler

a. Charles II wearing St. Edward's Crown. From the portrait by Michael Wright now at St. James's Palace

b. Edward the Confessor. Bronze figure. From the tomb of Henry VII at Westminster

c. Head of a king. From Holinshed, showing the conventional type of crown

a. Henry V crowned with St. Edward's Crown

b. Henry V enthroned and wearing the Crown of State

Westminster Abbey. Chantry of Henry V. Coronation groups

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